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EDITORIAL.

In the first article Mr. Trettien attempts to summarize and add to the work done in the developement of the child's power of language. He finds distinct periods each of which he subdivides. These begin with the early differentiated cry, spontaneous babblings. Then comes the period of articulation with imitative sounds, the understanding of words, language retardation, and third, the period of independent use of language. He discusses the sentence word, the sentence with and without inflection, and draws pedagogic conclusions. He then discusses the questioning age, interests in myths, stories, words, personification, dramatization, the dumb-bound feeling, and carries his study up to adolescence.

In the second article Dr. Smith brings together an interesting body of material on adolescent affection in which she treats such interesting topics as starvation for love, attachments between boys, love of an ideal, opposite sexes of equal and unequal age, etc. She appends a bibliography.

In the next article Mr. Book has collected a very copious mass of data from which he endeavors to infer the cause why so many pupils, especially boys, drop out of the high school. These causes he classifies into three main groups, (1) commercial, including desire to get money, support one's self, get started, (2) individual lack of health, ability, ambition, patience, (3) the school work, discouragement, loss of interest, failure to see

the value, overwork, and so on. More than half those who ought to complete the high school never enter it, and of those who do only twenty per cent. remain. Poverty is not a very imperative cause. Loss of interest and discouragement are the two most important causes.

The book notes are unusually copious, including in all several score new publications.

PSYCHOLOGY OF THE LANGUAGE INTEREST OF CHILDREN.

By A. W. TRETTIEN, Fellow in Psychology, Clark University.

INTRODUCTORY STATEMENT.

Since the pendulum of psychological investigation has gradually moved from the metaphysical toward a more scientific point of view during the last two decades, many important observations have been made upon child life which begin to suggest what the deeper interests of childhood are. And when genetic psychology has answered that question, it will be called upon, at least, to suggest an answer to a pedagogical corollary,—What food, physical and mental, will best contribute to a most complete development of the child?

The following study is an attempt to correlate such observations as have been made upon the language of children; and to trace the periods of growth and development of the *language interest*, in order to bring into relief those stages in the unfolding mind in which the growth of language has been especially significant or intense. The data which have contributed to this study have been gathered from the individual records of children, from the general psychological, child study and philological literature, supplemented by observations of parents and teachers.

When Froebel gave to the world his "Education of Man," nearly a century ago, he seems to have anticipated the line of the modern genetic movement when he said, "The mind and the outer world (first as nature), and language, which unites the two, are the poles of boy life, as they were the poles of mankind as a whole in the approaching maturity." He there indicated the fundamental lines of interests along which the human race has moved and lived and had its being, namely, Art, Language, Religion, and Science. And each of these interests, by the peculiar form of its reactions, has left the earmarks of progress upon the race. Before language in its present form was possible in the race; before it could develop to any degree of complexity, the senses, nerves, muscles, tongue, lips, larynx, and lungs were all made. On the other hand, as the race moved on in its progress from *homo alalus* to *homo sapiens*, the earlier forms of impulsive expressive movements became inadequate under conditions of a larger experience, dumb signs

and inarticulate cries were superseded by the higher forms of articulate speech and, as Drummond says, "a body of language was built up word by word, as the body was built cell by cell."

Psychologists and philologists are alike agreed in that the language interest holds a unique position in mental development. "There is not in a known language," says Professor Whitney, "a single item which can be truly claimed to exist 'by nature;' each stands in its accepted use 'by an act of attribution,' in which men's circumstances, habits, preferences, and will are the determining forces." Language thus becomes an index of the stages of culture. On the other hand, speech has been the ladder by which the mind has ascended into the higher forms of thought. Or, to change the figure with Sir William Hamilton, "Language is to the mind precisely what the arch is to the tunnel. The power of thinking and the power of excavating are not dependent on the word in the one case nor on the mason work in the other; but without these subsidiaries neither process could be carried on beyond its rudimentary commencement."

In studying the language interests of children, we are in a field not without its difficulties. While much has been written upon the development of language in the race as well as in the child, there are at present only a limited number of well authenticated continuous observations of child language available.

The second difficulty results from the fact that the language interest in its fuller development becomes exceedingly complex and intricate, since its roots extend into every realm of the soul,—senses, emotions, intellect, and volition all play upon the cords of vocal expression. And if, as Meumann says (54, p. 8), the development of language is to proceed normally, there must have occurred at no point a defect or a retardation of the physical or psychical growth. The attention of the child, his power of concentration, his memory, and above all a disposition (*gemuthsleben*), indeed, peculiar impulses, like the impulse of imitation, must be absolutely intact—the powers which correspond to this period of development. If even a single one of these general psychological conditions is not fully met, the development of speech becomes abnormal, either by being unduly retarded, or by remaining absent entirely.

GENERAL THEORIES OF LANGUAGE DEVELOPMENT.

Since the days of Psammetichus, King of Egypt (d. 610 B.C.), the speech of little children has been a source of wonderment to man; for this ancient king, according to Herodotus, began to speculate upon the problem of the origin of language. He pursued the experimental method in attempting to find the original language of primitive man; since language was be-

lieved to be innate, and that if a child could be entirely secluded from human contact, he would revert instinctively to the primitive language of the race. With this theory in mind, according to Farrar, the great king placed two infants under the care of a shepherd with the injunction to let them suck the milk of a goat and to speak to no one in their presence. When the shepherd, after two years, came to them, the little ones came forward with outstretched hands uttering the word *bekos*, which was found to be the Phrygian word for *bread*. The king thereupon concluded that the Phrygians were the most primitive people and spoke the original language.

While the origin of race language remains as much of a mystery as ever, the principal theories of development in modern thought naturally fall into two general classes; those which place the emphasis upon the impulse of expression, and those which place the emphasis upon the impulse of imitation. To the first class belongs (1) the natural sound theory, which holds that speech sounds are interjectional forms of language. (2) To this class, also, belongs the invention theory, which holds that the race and, in a measure, the child sets about and invents a language for itself. The invention theory, as such, is no longer accepted by psychologists. (3) The supernatural or miraculous theory may also be placed under this class. It holds that language was a special gift of God to man. To the second general class belongs the imitation or onomatopoeic theory, which is historically the oldest, and it is still most widely accepted to-day. Its fundamental position is that speech is directly or indirectly derived from the imitation of sounds perceived. On the whole the most tenable theory from a psychological point of view, and one which, in a measure, unifies the acceptable features of the various theories, is the theory which Professor Wundt (91, II, p. 603) sets forth in the *developmental theory*. This theory holds that language was not superimposed upon the mind at any stage, but develops with the mind as a form of mental reaction, a differentiated form of the pantomimic movements. As the infant is born into an exceedingly complex language environment, and the impulse of imitation manifests itself early, language necessarily becomes of precocious development. This theory recognizes the function of both the spontaneous impulse of expression as well as the imitation in the development of child language.

As regards the physiological and psychological processes by which the faculty of articulate speech was acquired, John Fiske believes that no adequate explanation has yet been offered either upon the Darwinian or upon any other theory. "For," he continues, "the so called 'bow-wow' or onomatopoeic theory is no doubt correct, so far as it goes, as a description of facts

which have attended the acquisition of speech, but it hardly goes to the root of the matter. The power of enunciating sound so as to communicate ideas and feelings is certainly an art. . . . For the original acquisition of such an art two conditions are requisite,—the physiological capacity of the vocal organs for producing articulate sounds, and the psychological capacity of abstraction implied in the conception of sign and symbol. It is due to the lengthened period of infancy in man that gives to the psychological capacity a certain amount of flexibility or capacity of framing new combinations of reaction which is at the bottom of the Darwinian theory."

FACTORS UPON WHICH THE DEVELOPMENT OF LANGUAGE DEPENDS.

In studying the periods of the language interest of children, three periods have generally been recognized in child-study literature which correspond very closely to the periods of physical growth on the one hand and to the development of certain psychical activities on the other.

The studies of Dr. Burke on the general growth of children, and Vierordt, Boyd, His, Meynert and others on the development of the central nervous system show that the first period of accelerated growth occurs during the first year of the child's life; that there is a period of gradual decrease in the rate of growth from the first to the sixth or seventh years in girls, and seventh or eighth years in boys; and another period of accelerated growth from about ten years in girls and eleven in boys, to fourteen in girls and sixteen in boys. With each of these larger waves of growth there are lesser fluctuations of development peculiar to that period, such as the development of the general nervous system, awakening of the special sense-organs, muscular co-ordinations, organs of expression, and the like, which lie at the foundation of the growth and changes in language.

The second or psychological factor upon which the growth of language depends is the instinctive tendency to imitate. As Mr. Darwin says: "I cannot doubt that language owes its origin to the imitation and modification of various natural sounds, the voices of other animals, and man's own instinctive cries, aided by signs and gestures." And Tarde maintains that imitation plays the same rôle in the psychic life that heredity does in the organic life or that vibration does among the inorganic bodies, and that language itself is the "great vehicle of all imitation."

Psychologists who have treated imitation have generally recognized this tendency of the soul either as an instinct or as an ordinary sensori-motor reaction which finds its differentia in

the peculiarity of its muscular discharge, which Baldwin calls a "circular activity;" that is, there is a tendency of a reaction to repeat its own stimulating process. The child continues to repeat the movement he has found efficient in producing an interesting result, the germ of which, as Professor Baldwin has shown, lies in ideo-motor suggestion.

Three distinct periods of imitative movements have been observed in human development. During the first months of life, the 'organic' reaction occurs which tends to repeat its own stimulation, such as muscular contractions that have become habitual. This belongs essentially to the simpler sort, and is only an approximate imitation. It is psychological only in that there is a sensori-motor suggestion, the infant's reaction may not even approximate the copy or make an attempt to repeat or improve by a second trial. This form of imitative reaction, perhaps better biological adaptation, plays an important rôle up to the eighth or ninth month of the child's life. The second period begins in the latter half of the first year and is especially intense during the second and third years of life. It is the psychological or conscious phase; when it appears it is the predominant activity of the mind. "The copy," says Professor Baldwin, "becomes consciously available in two ways: first, as sensation, the individual seeks to reproduce the sounds heard or the movements seen; and second, as memory, by which the copy is recalled and reproduced again and again." Lloyd Morgan has summed up this period as follows: "the intelligent stage of the profiting by chance experience. Intelligence aims at the reinstatement of pleasurable situations and the suppression of those which are the reverse."

But there is still a third period of imitation and imitative reaction. While in the first period the reaction is principally in the realm of the unconscious, in the second period the reaction is repeated in a try-try-again manner until great exactness is acquired; in the third period the imitator becomes an artist. For close in the wake of imitation there comes the imagination, and imitation becomes not merely reproductive but productive as well, and its development may be observed in the periods of co-operative play, of popular fads, and of dramatic and artistic effects. Imitation now changes from the reproducing of an objective copy to the reproducing of a subjective model or ideal.

THE PERIOD OF INFANCY: OR THE PRIMARY PERIOD OF LANGUAGE DEVELOPMENT.

When we turn to a consideration of the language interest itself, we find that all observations of child language point with irresistible force to the conclusion that there are periods in which the "language-making instinct," as Mr. Horatio Hale

(30) calls it, is especially strong. In tracing the curve of development it falls into line with the curve of the general physical and mental growth.

I. The first or primary period of language is, of course, the period of the learning of the mother-tongue, and extends from birth, the time of the reflex, expressive movements of the cry to about the middle of the third year, under normal conditions, when the child is able to express its thoughts by the use of the conventionalized symbols.

II. With the increased power of the imagination, there may be observed a second period of the language interest, extending from the third to the eleventh or twelfth years. This is essentially a period of play upon language—sounds, words, and sentence-structure have been mastered as an instrument of communication—but now there is an added interest which centres in the sound of the word, or its rhythmic combinations with other sounds.

III. There is still a third period when the language tide rises, and that is during the years of adolescence, constituting what Miss Williams has called "a second day of grace for those who, perhaps through no fault of their own, have failed to properly improve the first."

I. THE PRIMARY LANGUAGE PERIOD.

It has generally been recognized that the child passes through three distinct periods of development in learning to speak its mother-tongue. Lindner (47, p. 3) has given the following general classification of the expressive movements of infants: 1. The period of expressive movements, gesture, or sound, expressing states of emotion without the purpose of communication; 2. The period in which the child begins to understand the meaning and purpose of language, but has not yet developed the power of speech co-ordinations to enable it to express its thoughts and feelings by means of articulate sounds; 3. The period in which the child develops those co-ordinations which enable it to express its thoughts and feelings by means of articulate sounds.

Kussmaul (45a, p. 47) has classified the periods from the point of articulation: 1. The period of primitive sounds, the purely reflex which have a much larger range than the adult phonetic alphabet; 2. The period of imitative sounds; 3. The period of thought expression. If we turn to the mental stages of linguistics with Oltuszewski (59), we may recognize: 1. The primitive period characterized by the reflex pain phenomena of early sounds; 2. The period of the development of the linguistic memory centres, the auditory and motor memories; 3. The period of the association of ideas with words.

I. THE PERIOD OF EXPRESSIVE MOVEMENTS.

First Period—The reflex and Automatic Period. Lindner (47) speaks of this first period of the child's life as the physiological step of language development. The physiological development is significant. The organs of respiration and articulation are still rudimentary in their development. The sense-organs become adjusted during this period to receive the stimulations from the external environment, and the brain centres begin to function.

On the side of impressions, the experiments of Kussmaul, Gensmer, Kroner, Preyer and others go to show that children respond to the stimulations of taste, touch, and smell at birth. The observations recorded show that the eye is sensitive to light on the first day of life, and that the ear is sensitive to sound several days later. By the close of the second week, passive attention makes its appearance, and the child begins to stare at objects of light and to listen to sounds; and several weeks later, it can be soothed by the sound of the mother's voice.

On the side of expression, there are present at birth the reflex muscular movements which are not entirely undifferentiated and unco-ordinated in the cry. Perez (61, p. 11) observed that pre-established association between certain movements and certain sensations, agreeable or otherwise, can be seen at birth. The vague incoherent movements of the arms, legs and facial muscles, which young babies make, as if trying to escape from the pressure of their clothes, or struggling against some painful state of their system, all belong to the first class of indefinite reflex actions. These automatic movements early differentiate into expressive movements—the smile and even laughter have been observed in infants during the fifth day—"perhaps without intention or sentiment of pleasure, and simply the result of chance action of the mechanism."

By the end of the fourth month, the child is able to control its expressive movements to such an extent as to enable it to turn away its head from disagreeable objects or remove the objects with its hands. These early movements lie at the foundation of all sign and gesture language, and they become the more significant when they accompany vocal expressions. The child's first utterance is a cry of distress. This has been variously interpreted by interested spectators. To Semmig it sounded like "heavenly music;" to Kant it appeared "a cry of indignation and of wrath;" to others still, a "lament over the sin and misery of this world." "But," says Preyer (65, p. 211), "these interpretations go to wreck upon the repeatedly established fact that new-born children without any brain at

all cry out, and many a healthy new-born, as Darwin reports, does not cry, but sneezes." As recognized by psychologists to-day, the first cry is an expirational reflex, caused by the pain sensations accompanying birth, the sudden change of temperature, and other tactile sensations. There is a production of a current of air which passes in its early stages unmodified by the vocal organs, and consequently the sound is undifferentiated in character. The same tone, pitch, and quality of voice serves to express the child's emotional states. In either case, whether it is a cry or a sneeze, the utterance is purely a reflex movement and occurs as a physiological process rather than a psychological directed by consciousness. Very soon, however, Preyer observed it during the first week of life, this undifferentiated reflex begins to take on a language character; and begins to serve the child as a means by which it can express its emotional states. Discomforts, as hunger, thirst, cold, wet, and pain, produce different reactions; consequently there is a differentiation of the expressive sounds. The cry of pain and fear becomes short and explosive; the cry of hunger, a long drawn out cry of pain interrupted by frequent pauses. The tone of voice also passes through several stages of evolution. As has been shown by Garbini (24, p. 53), the first cries (reflex) are weak and without individual tone; but all tones, from the deep chest tones to the strongly nasal ones, may be heard. After the first two months, the voice appears, and settles usually in a clear falsetto.

(1). *Early Differentiated Cry.*

Experienced nurses and mothers can early interpret the variations of the cry, which the child itself may not hear, and administer to its wants accordingly. The child, on the other hand, soon becomes conscious, in expressing emotional states, of a mechanism by means of which it can gain certain wants, and as soon as it has made this discovery, it employs the modifications of the vocal utterances as a vehicle of communication. "Herein," says Von Frenzel (22, p. 28), "lie the most primitive combinations of the various speech centres; and it is here that we must seek for the beginning of the development of speech."

Observers generally agree that the expressions of discomfort precede, in development, those of pleasure or comfort. Mrs. Moore (57) sums up her observations upon this period as follows: "Feelings of discomfort were felt at birth, but not distinguished one from another, they were strong. Pleasure was not felt as much at birth. Movements directed toward the attainment of comfort replaced in a measure the mere expression of discomfort. After the growth of desires, development pro-

ceeded rapidly, in response to a demand for the satisfaction of them."

M., 1st week. Above all, crying is characteristic: it is piercing, and persistent in pain, a whimpering in an uncomfortable posture, interrupted and very loud in the cold bath. When the child cries for hunger, the cry is interrupted by frequent pauses, the eyes are generally closed tightly, the tongue drawn back and spread out.

F., 16th week. We can distinguish the sounds for hunger, sleepiness, anger, and joy at four months of age. On the whole, there are but two kinds of sounds which are unmistakable,—the one denoting feeling of discomfort or pain, the other a feeling of comfort and pleasantness.

M. By the ninth week, one could distinguish the hunger-cry, the cry of pain and impatience, and one of appeal, which was used when, after crying from hunger, he saw his mother approaching his bed. In the eleventh week he added a mingled cry of pleasure and impatience by which he greeted the appearance of his dinner. In the nineteenth week, when accidentally hurt, he cried in a way to show plainly that not only his body, but his feelings, were hurt.

M., 1st day. When uncomfortable the child cried.

10th day. Tear secretion observed for the first time.

17th day. Fretting, a sort of cry, expressed discomfort.

55th day. Displeasure indicated by hard crying and rigidity of the whole body, which was so complete that if taken by the hands he could be raised to his feet without having bent the vertebral column or limbs.

12th week. The child cried "*eng*" when hungry, and "*Mä-ä-ä*" when hurt.

M., 6th week. In the sixth week (36th day) the child laughed in response to his mother's crooning, and the following week he responded to it with his first word, "*goo*."

M., 5th week. The sensibility to sound has increased to such a degree that the child seldom sleeps in the day time if any one walks about or speaks in the room.

14th week. Refusal expressed by "*nannana, nānā*."

16th week. Unpleasant feelings expressed by predominance of the *ua-ua, ua*.

7th week. To talking and singing he replied by cooing.

Von Frenzel cites a case where a child of two months expressed comfort and discomfort by different modifications of the vowel *a*.

M. From the fourteenth week loud or high pitched voices caused him to draw down the corners of his mouth and cry. When his mother said sharply to him, "*What is the matter?*" he cried piteously.

F., 24th week. The vocal organs now begin to assume some power of control over the sounds produced, resulting in the well-known "*coo*."

F. In the eighteenth week, and before, the following cries were distinctly recognizable,—discomfort or distress, anger, sleepiness, and a cry for needed attention.

(2) *Spontaneous Babblings.*

By the close of the second month of life, considerable progress has been made in muscular co-ordination and control of the tongue and lips. Attention and memory have made their appearance, and the child begins to take delight in vocal babblings, the practice field of linguistics, with a marked increase in the number and variety of articulate sounds. Mrs. Moore

(57) observed that by the close of the fourth month her child had made nearly all the sounds which occur in the language. "Yet," she says, "I had the exact record of but few which had been pronounced as isolated sounds, or as short syllables, and so distinctly as to render their identification easy and certain." And Preyer (65, p. 107) found it still difficult to recognize definite syllables among the more varied utterances in the ninth month of the child's life. But he found the voice although loud and inarticulate at times already modulated and expressive of psychical states.

As Tracy (81) and Lukens (49) have shown, and Meumann (54) and Ament (1) later, the vowel sounds appear first as differentiated sounds, and long before the sixth month the primitive vowels are combined with one another and with consonants. The labials *b—p—m* appear first and as initial sounds. To quote Meumann (54, p. 11),—"In the development of the child's spontaneous babblings, a definite process may be observed. It begins with the vowel sounds, especially with *a* and *ä*, and several others difficult to describe. Then appear the consonants in combination with vowels, in the order of labials and dentals, but often the more difficult gutturals appear early in the stage."

M. By the twelfth week he began to use his tongue which had hitherto moved but little in his mouth. Thereafter there was a rapid increase in the number and variety of sounds made by the child in crying and babbling.

29th week. "*Bob-ba*" indicated comfort; "*Mom-ma*" indicated hunger; singing noise made by the child meant contentment.

F. In the seventh week, for some days, she experimented with the tongue a good deal, putting out and withdrawing the tip through pursed lips. In the eighth month, she returned more intelligently to this, and from time to time during the month had a habit of running out her tongue and moving it about, feeling her lips and trying its motion.

F. Began to use the *googly-goo* language suddenly in the fifteenth week; also made vowel sounds alone.

M., 7th week. No account of the infant's babblings was kept aside from the fact that in his very early days he "talked back" with the word "*goo*," which later changed to "*gagoo*," and that in the fifteenth week he often amused himself by making a continuous sing-song tone.

M., 52d day. From this day the child began to express his feelings of pleasure by babblings which were just like those of his sister—*ärrä* or *arra*. The babbling increased according to his physical comforts.

54th day. The child entertained himself for over an hour.

F., 59th day. Louise began to babble on the 59th day.

9th month. The complex combination of movements of eye, larynx, tongue, lips, and arm muscles appears more and more.

There occurs at this time also a rapid development in the recognition and discrimination of sounds. Of the thousands of words, says Ament (1, p. 35), which have been hurled at the

child during its early months of life, all have fallen unheard and uncomprehended until finally the soul catches, not only the general tone, but also the finer distinctions in the sound of its mother's voice, which begins to carry with it a meaning. This power of discrimination arises during the middle of the first year. Miss Shinn and Mrs. Hall observed it first during the fifth month of life. And there may also now be suggestions of sound imitations.

F., 5th month (137th day). I was hoarse with a cold and when I spoke, the baby looked and listened in a way that I thought showed a sense of something unusual about my voice. At this time I often read softly to her mother as she nursed the baby and sang low to her meanwhile. On the 148th day, as I did this, the baby suddenly raised her head and gave me an inquiring look, evidently for the first time distinguishing our voices as two separate sounds.

M., 5th month (140th day). The recognition of the mother's voice was the first positive evidence given of recognition of a definite sound. The child soon knew his own name, or at least knew when he was called; but it required three calls to induce him to turn toward the sound. At the first call, a change took place in the facial expression; at the second, he laughed; and at the third, he turned toward the speaker.

F. In the twenty-second week, I noticed her opening her mouth and making a funny sound in her throat, and after experimenting was convinced that she was trying to imitate my way of saying "ba-ba" to her. Twenty-eighth week she still tries to imitate "ba-ba," and likes to hear the prolonged sound of *sh*, a clucking sound, a smack, and the dripping or running of water.

2. THE PERIOD OF ARTICULATION.

(1) *Imitative Sounds and Babblings.*

While there is no hard and fast line of demarkation between the first and second periods of the development of the mother-tongue, the first period is essentially one of physiological adjustment with its reflex and automatic sounds and movements, while the second is marked by an accelerated mental development; first, by the development of the language memory centres (auditory and motor memories), and second, by the increased tendency to imitate the sounds and movements which issue from the environment.

The child now develops an articulate language with the same natural facility that any other species of animals does the vocal utterances peculiar to its kind, and takes special delight in uttering the onomatopoeic sounds which as yet have no meaning to it. The range of the sounds embraces, not only the articulations of the mother-tongue, but also those of other languages, since, as Ament (1, p. 34) says, the child's mouth is still unbridled, and the vocal organs can move in any manner with equal facility. This practice upon the "raw material of the language," as Taine calls it, passes along quite a definite

line of growth. And Meumann (54, p. 7) has traced it from the spontaneous impulse to utter sounds, inarticulate and unintelligent, to the voluntary expression of articulations expressing thoughts and emotions.

This is the period which embraces, according to Dr. Tracy, the second six months of life—the child makes rapid strides in the imitation of sounds and in the comprehension of the meaning of words and gestures. It understands many words, but uses very few of them; it delights in the stimulations of rhythmic sounds and movements. It also knows the members of the household and recognizes their names, as well as parts of its own body.

While simple imitation may have appeared during the early months (Preyer observed it at the age of three or four months), conscious imitation first appears between the seventh and the ninth months of life, after the child has learned to use its senses, and after the memory is well developed. When conscious imitation does appear, it for a time takes possession of the soul, and is the predominant activity. The observations upon child-language development put new meaning into Mr. Burke's words when he said, "It is by imitation far more than by precept that we learn everything; and what we learn thus we acquire not only more effectually but more pleasantly." The child now plays constantly during its waking hours, not only upon the sounds which it hears, but it imitates the intonations of the voice and gestures as well.

M., 7 months. Immediately after seeing his grandfather emit a short, quick breath, he did so. He then imitated a cough, shrugging of shoulders, and other motions. On the following day he imitated silent lip-motions, and silently imitated the lip-movements which accompanied vocalized words.

F., 5 months. Baby Florence, when five months old, imitated very closely the growling of a pet dog, and at six months associated the name by growling when asked what Bonnie did.

F., 12 months. Always keeps time by moving her hands up and down whenever she hears any quick music.

M., 8 months. He waved his hand "bye bye," imitating another child.

F., 9½ months. She imitated closing the hand on three different occasions, and a week afterward she imitated movements of the lips, and certain sounds, as *pa*, *ma*, etc.

M., 10¾ months. One day his mother snapped her fingers. He listened attentively to the noise produced. Then he clicked his tongue against the hard palate, and the result was a sound almost exactly like the one produced by the fingers.

M., 9 months. He began to repeat a sound of his own upon hearing it uttered by another person.

M., 7½ months. Very early in the imitation stage, the lip-movements accompanying such words as "*mamma*," "*papa*," and "*bye-bye*," were repeated. Two days later, in response to a lady's farewell, he imitated both gesture and word.

M., 36 weeks. He acquired the habit of repeating a sound of his own upon hearing it uttered by another person.

42 weeks. Intentional, but unintelligent, repetition of syllables and words. These syllables were strung together, and were uttered with great rapidity, producing a chatter which, in its tones and inflections, bore a striking resemblance to conversation.

M., 44 weeks. In the eleventh month some syllables emphatically pronounced were for the first time correctly repeated. I said "ada" several times, and the attentive child, after some ineffectual movements of the lips, repeated correctly "ada," which he had for that matter often said of his own accord long before. It was the first *unquestionable* intentional sound imitation. The same day, when I said "mamma," the response was "nanna."

F., 22d week. Tries to imitate "ba ba" which had been repeatedly said to her.

M., 9¼ months. When told to wipe his nose, he slowly took the handkerchief from his mother's hand and obeyed, in imitation of what he had previously seen and experienced. The barking of a dog, the mooing of a cow, were imitated, as were other sounds previously heard.

M., 9 months. The child distinctly imitated the intonation of the voice when any word or sentence was repeated in the same way several times.

M., 11 months. Intentional sound-imitation appeared on the 329th day.

F., 9th month. She does a great deal of talking after her kind. It is not the syllable exercise of some weeks age, but a conglomeration of sounds.

(2) *Understanding of Words.*

By constant repetition of the differentiating sounds, which the child soon intellectualizes, the articulate sound or word changes from its early nature, in which it expressed merely an emotional state, to a second nature in which it becomes an expression of an object of thought. This is the first step in the independent and intelligent use of language. The hitherto spontaneous utterances now begin to suggest to the mind definite facts in the world about it, and the child pushes out into a new world of thought and the communication of thought by means of symbols. While there are large individual differences in children as to the time when the understanding of words begins, yet from the observations which have been made, it occurs, in general, during the second quarter of the first year of life, and the time when the first words are used is between the eighth and tenth months in American children, and somewhat later in German children.

As will be noticed in the observations, there occurs a period of several months between the time when the child first begins to understand the meaning of words and when it is able to use them in expressing its own thought. The few sounds which have a speech value to the child are strongly marked by intonations and supplemented by gestures. Desire, hunger, joy, and fear may be expressed by the same word, but with a difference in modulation and gesture setting. Preyer observed

eleven different meanings of "*atta*." The writer himself observed seven different meanings of the syllables *tī-yī*. This is a long and an important step in the language development, since it marks the time of association of the object with the word, and also the time of voluntary control of the motor-speech-centres, which enables the infant to produce the correct sound at the time when wanted.

M., 18th week. No evidence was given before the eighteenth week that words conveyed any idea. But when the child looked toward the speaker at the sound of his name, "Albert," and into the mirror at the word "baby," he must have had some idea as to the meaning of the words.

M., 24th week. The words "dinner," "mamma," and "papa," were next comprehended.

F., 28th week. In trying to call attention, she says "a?" or coughs once or twice. When she wants something, when not distressed, she says "Mammam," or "bapbap" over and over. Of course these do not mean *mamma* or *papa*, for she does not know these words.

M., 38th week. He began to associate a few words with persons and objects.

M., 18th week. The child looks about the room when his mother asks, "Where is papa?"

M., 20th week. He was carried daily to a clock and had the word "tick tick" pronounced for him; sometime later, while lying in his bed, the word "tick tick" was pronounced loudly, whereupon he looked toward the clock.

M., 14th month. The child, standing erect, being held by the hand, was asked, "Where is your clothes-press?" whereupon he turns his head and his gaze toward the clothes-press, draws the person holding him across the room, and opens the press.

F., 24th week. I am perfectly satisfied that my baby-girl understood the word, "mamma," on her 164th day.

F., 11 months. Her understanding of speech had grown wonderfully, and as she was docile in obeying directions, I could always find out whether she knew a thing by name, by saying, "Point to it!" She knew 51 names of people and things, 28 action words, and a few adverbial expressions, like "where," and "all gone,"—eighty words in all, securely associated with ideas.

F., 8 months. There are indications that she understands when I say, "Where's Daddy?" or "Where's Rachel?"

(3). *Language Retardation.*

There occurs at this period, during the last quarter of the first year and the first quarter of the second year, a time when the development of language may be retarded, or the child may even lose some of the words which it has acquired, due to teething and learning to walk. This is especially marked if there are complications which drain the physical energy or direct the attention along other channels. Lindner reports that during the two weeks from the 37th to the 39th weeks of the child's life there was no growth in language due to the suffering from teething. Another observer reports that when the baby was learning to walk, during her 10th, 11th, and 12th

months, she did not talk as much as before. When she was sick, she talked very little, which caused an arrest in language development. If, however, the child learns to walk with little difficulty it does not interfere with learning to talk; but it may even have a stimulating effect since it extends the infant's realm of experience.

"Walking was commenced," says Professor Jegi (43, p. 24), "in the 14th month. It did not seem to interfere with speech in the least, due, I think, to the fact that G. took to walking almost in a day, and never again reverted to her former more awkward mode of locomotion. These two impulses, walking and talking, so important in childhood, manifested themselves at the same age; but since walking was mastered so quickly and with apparently little conscious effort, the mere ability to walk seemed to exert an exhilarating influence on all mental activities, and thus stimulated the speech centres as well. The acquisition of new words was clearly accelerated." Dr. Triplett observed that, while there was no increase in weight between the 21st and 26th weeks, there was a rapid development of the mental activities.

3. THE PERIOD OF INDEPENDENT USE OF LANGUAGE: OR SPEECH CO-ORDINATIONS.

"In the evolution of language," says Major Powell (64, p. 3), "the progress is from a condition where few ideas are expressed by a few words to a higher, where many ideas are expressed by the use of many words; but the number of all possible ideas or thoughts expressed is increased greatly out of proportion with the increase of the number of words." This growth is especially evident in the child during the second and third years of life, when it learns the independent use of its mother-tongue. Three distinct steps have been observed in this process. (1) The stage in which the sentence-word supplemented by the aid of gestures is employed in expressing the feelings and thoughts; (2) The stage of the sentence without inflections; (3) The stage in which the various "parts of speech" with their inflections appear. Beginning at about twelve months of age, when the vocabulary embraces but a few words, which are uttered at intervals, the curve of acquisition of new words with distinctness of pronunciation rises slowly to the age of fifteen to eighteen months, when, in general, there is an increased rapidity from a score of words at fifteen months to as high as fifteen hundred at thirty months.

F. After her 18th month birthday, the child's progress became much more rapid, and it would not have been possible to take down all her new words without giving much more and more continuous attention than I had at my disposal. The vocabulary is increasing

fast and almost any word proposed to the child is imitated with some real effort at correctness.

F., 15th to 17th month. Great progress is made; the child has learned to walk and even to run. She is gaining new ideas every day, and understands a number of phrases, such as these: "Fetch the ball;" "Come and stand between papa's legs;" "Go down there."

M., 21 months. Makes very rapid progress in extending his vocabulary, but pronounces his words in a manner peculiar to himself.

M., 38 months. Felix was very backward in learning to speak. Suddenly one evening, it was as though the Holy Ghost had descended upon him and had poured into him the gift of speech; for he repeated everything that was spoken to him very correctly.

(1) *The Sentence-Word.*

During this stage, the words which the child employs are words expressing a want or a novel situation; they are emotional rather than intellectual, and have properly been called "sentence-words." Pollock's little girl used the expression, *m-m*, when she wanted something. Lindner's boy said *bat* for *bitte* (please). "The child," says Meumann (54, p. 31), "in the beginning does not designate the objects or actions about it, but expresses its emotional or volitional attitude toward these in its first words; it expresses its longings and desires, its pleasures and displeasures toward them." In this manner, the child early gives the appearance of naming an object. It speaks the word *wa-wa* when it means "I want a drink of water." Ament (1, p. 77) observed that the child Louise spoke the syllables, *mämmämm*, on the 206th day without definite meaning simply as a spontaneous utterance; on the 254th day she used the same expression to designate objects of food and drink, and as an exclamation in calling to her sister, and also as a negative. On the 571st day she called her mother "*mömi*;" three weeks later she called her "*mámá*." On the 615th day she discontinued the use of *mämmämm* and called all solid food "*brodi*" (bread), liquid food except milk, "*bi*," and milk, "*mimi*." The reduplication, *babab*, as Ament observed, passed through a similar process of evolution from a purely spontaneous emotional expression to an expression associated with some object of want or interest, and finally the thought element appears. On the 206th day, *babab* was a spontaneous expression without meaning and soon passed away. On the 514th day, she uttered it as an expression of joy on seeing her mother. On the 591st day, she called her father "*baba*," later, her uncle and a picture of a prince were called "*baba*." She then called a large portrait by the same name. On the 662d day, she restricted the expression to living persons, and finally to her father. Professor Dewey (19, p. 64) gives a list of seventeen words—the vocabulary of a child of twelve months—*see there, bye-bye, bottle, door, no, no, stop, thank*

you, boo (peek-a-boo), *daw, down, papa, mamma, grandma, Freddy, burn, fall, water*, and concludes that only the four proper nouns are, psychologically speaking, names of objects. *Water* is a verb as well as a noun; *door* is always accompanied by gestures of reaching, and an attempt to swing the door; *daw* is apparently a request, an expression of expectation of something good to eat and the name of a thing altogether; *bottle* certainly has adjectival and verbal implications as well as nominal. "At present," says Professor Dewey, "I shall regard it as a complex, nominal-adjectival-verbal, the emphasis being on the noun, while six weeks previously it was, say, verbal-adjectival-nominal. 'Stop,' 'no, no,' 'burn,' 'see there,' etc., are equally interjections and verbs."

M., 29th week. *Bab-ba* indicated comfort and good feelings. *Mom-ma* indicated hunger and other discomforts.

10th month. The associations became established in the case of one word, *papa*. Representatives of the class of interjections were among the earliest words in the vocabulary.

M. The first words were interjections.

M., 9th month. The word *bye-bye* said so unexpectedly in the 9th month continued to be used until one day he refused to say it and did not again employ it for ten days, when he used it spontaneously and used it regularly after that. The next word was *boo-woo*, first said in imitation of the dog, but very soon used in answer to "What does the dog say?"

42d week. Great advancement was made in the understanding of words, but no new words were added until he exclaimed "*papa*," as his father entered the room.

M., 22d month. Two words only,—*papa* for *father*, and *bät* or *bit* for *bitte*—rightly applied of the child's own accord.

M., 22d month. The child uses the term *māmā* and *mō-mōm* when hungry and thirsty.

M., 14th month. Use *da* to signify *that* (*das*) for the first time to express a thought.

F., 9th month. To-day for the first time baby began to say "bye-bye-bye" and to wave her hand. She did this in imitation of some one else.

F., 13th month. The first intelligent word is spoken when she reproduced the oft-repeated word, *mamma*.

F., 12th month.—*M-m* generally indicated a want of something. *Ba-ba* was (1) a sort of general demonstrative standing for the child herself, other people, or the cat; (2) an interjection expressing satisfaction.

F. Used the word, *papa*, to indicate that *papa* had come or gone; later for the person. *Minn* was used to suggest something to eat.

F., 7th month. The following sounds were used,—*mammam, bap-pap, dādā, kākā, and gägā, nānā*.

According to the anthropologist, Waitz, the unit of language is not the word, but the sentence. "Or," says Romanes, "otherwise and less ambiguously expressed, every word was originally itself a proposition, in the sense that of and by itself it conveyed a statement."

The question as to what parts of speech the child first uses

has provoked much discussion. Dr. Tracy (81) has undertaken to classify the vocabularies of over twenty children, numbering fifty-four hundred words, in order to determine the relative frequency of the various parts of speech. The average age of these children he takes as approximately two years. He gives the following results: Nouns, 60%; verbs, 20%; adjectives, 9%; adverbs, 5%; pronouns, 2%; prepositions, 2%; interjections, 1.7%; and conjunctions, 3%. Such classification, however, as Dr. John Dewey (19, p. 63) has justly criticised, is based upon the adult use of language, and consequently gives a wrong conception. Romanes (92, p. 294) calls philologists to witness the facts that language did not begin with any of our later-day distinctions between nouns, verbs, adjectives, prepositions, and the rest; it began as the undifferentiated protoplasm of speech, out of which all these "parts of speech" had afterwards to be developed by a prolonged course of gradual evolution. "*Die sprache,*" say Schilling, "*ist nicht stückweis oder atomistisch; sie ist gleich in allen ihren Theilen als ganzes und demnach organisch entstanden.*"

It is out of this undifferentiated language protoplasm—the sentence-word—that the rigid conventionalized forms, or parts of speech, rise. We have several continuous observations of children's vocabularies which enable us to study this process of differentiation somewhat more in detail. The early expressions are of an emotional nature and are furthermore, as we might expect, associated with the vegetative or nutritive function. Just as the early movements of the legs and hands are mouthward, so also the early expressions of the voice express the nutritive properties of objects in which the interjectional-nominal element is present though undifferentiated, hence it is possible, as observers have done, to classify these as nouns or as interjections. Or, again, the verbal element may be prominent in the form of a wish or gesture. This view is further strengthened by the studies of philologists who have studied the evolution of parts of speech in the race. Professor Whitney says: "The interjections are not in the same and proper sense parts of speech; they are, rather, analogous with those all-comprehending signs out of which the rest have come by evolution. A typical interjection is the mere spontaneous utterance of a feeling, capable of being paraphrased into a good set expression for what it intimates; thus, an *ah!* or an *oh!* may mean, according to its tone, 'I am hurt,' or 'I am pleased.'" Or, the infant may say, "Mum," "I am hungry;" "bup," "I want some bread and butter." It is the same psychological fact that takes place when the African negro cries out in fear or wonder, "Mama! Mama!": according to Lindley Murry, he is simply calling, grown up baby as he is, for his

mother; or the Indian of Upper California who, in an expression of pain, cries, "Ana!" (mother). These interjectional forms are, psychologically speaking, interjectional-nominal or interjectional-verbal or interjectional-nominal-adjectival-verbal, etc. Ament (1, p. 163) has classified the early sentence-words of the child which he observed and found that the different categories of language are present in embryo in the *sentence-words* which the child uses. Thus, the child pointed and said: *Weg! Weg!* (Gehe weg!) Go away! Interjectional. *Medi!* (Siehe das Mädchen!) See the girl! Substantive. *Baf!* (Babette ist brav!) Babette is brave! Adjective. *Dudu?* (Was thust du?) What are you doing? . . Pronominal. *Waschen* (Babette thut waschen) Babette is washing. Verbal-Infinitive.

Knidi (Knie dich) kneel. Verbal-Imperative. *Auf* (Das ist auf) That is up. Adverbial. *Mid* (Ich will mit dir) I want to go with you. . Prepositional.

Children in whom the mimetic impulse is less strong often take a rest at this stage of development, when they have learned to make their wants known by the sentence-word. This serves as a practice stage of motor-co-ordinations and thus prepares for the more complex period about to come. Mrs. Moore observed that from the fifty-second to the eighty-second weeks, words were added very slowly to the vocabulary. Though the child talked a great deal, he made a few words, chiefly nouns. After the eighty-second week, the acquisition of nouns proceeded at a rapid rate. The studies of children's vocabularies will show that the "parts of speech" which first become differentiated are generally substantive;—names of articles of food, members of the family, pets, parts of the body, etc.; but these are not isolated as was shown above; on the contrary, they are combined with the indicative gestures which express the verbal idea. "The objects," says Mrs. Hall, "are seen as a whole without regard to either qualities or motion; hence the early appearance (45th wk.) and great preponderance of nouns. Action being the most attractive feature of an object, that was noticed next in order, and verbs were introduced to express it (48th wk.)." Then next in order there appear the adjectives and adverbs; later, pronouns, prepositions, and finally conjunctions.

(2) *Sentence Without Inflections.*

The looseness with which the child's early words are thrown together indicates something of the thought structure,—the chaotic confusion and often bewilderment which exist in the child's mind. The age at which the first sentence appears varies considerably, but in general it is between the eighteenth

and twentieth months. The first attempt at sentence building consists frequently of compounding substantives, or combining a substantive with a verb or an adjective, both words expressing a vivid experience to the child. H., twenty-four months, when riding in the cars, was suddenly thrown by the stopping of the train. She looked confused and was told that "the car stops;" immediately the child picked up the expression, *car dops*. She had used words before for several months, but this was the first attempt at sentence building. Sully observed the first sentence, *Papa no* (Papa's nose). In case the sentence consists of a substantive and a verb, the verb is generally in the imperative form; as observed by Sully "Mamma tie." (Tie gloves.) There is no definitely assigned order of the words. Humphrey (61a, p. 12) observed that order was quite immaterial, and the child might say, "Julia broke doll," or "Julia doll broke," or "Broke doll Julia." These are the mountain peaks of language which make their appearance in the mist, and indicate the dawn of growing intelligence. The negative expressions of children further illustrate sentence structure. There is a peculiar form of expression in which the child expresses a thought in the form of an indicative or an exclamatory sentence; and then tacks on the negative; as, "*Henny go Papa—No.*" (Can Helen go with Papa? No.) She asked the question and answered it without a pause. Another form of spontaneous sentence has been observed by Professor Sully (78, p. 175) which is characteristic of this early period in which there is an antithesis under the form of two balanced statements. The child opposes an affirmative to a negative statement as a means of bringing out the fuller meaning of the former. Sully gives the following example: Boy C. would say, "*This-a-nice-bow-wow,—not-nasty bow-wow.*" In this case the habitual form of sentence is followed in rapid succession by another, a negative, situation of which the child was not conscious at first. One may even observe a look of disappointment with the negative which was not present in the mind during the first statement. "This use of the negative statement by way of, or opposition to, an affirmative," says Professor Sully, "grew in the case of one child, aged two years and two months, into a habit of description by negatives."

M., 23 months. Begins to put words together. Coffee-bean, which before was called "bean," now becomes "ka-boinen."

M., "*Papa-a-ng-i bich.*" "Papa schreibt Briefe." (Papa writes letters.)

"Olol-Job-ä—Rudi—Siki—haja" "Olol and Job are bad (names); Rudi and Siki good."

M., 11 months. The first sentence, *Papa gone*, though first repeated after his mother, was from that time used independently.

M., 14 months. *Papa—shoe—black-box*. (Papa blacks his shoes on that box.)

M., 16 months. *Pony—horsie—pony; boy—walk—Anna—walk—pony.* (Albert had a ride with a pony, a little horse, boy and Anna walked; but Albert had the pony.)

M., 17 months. *Mamma—hand—in—the—water.*

F., 21½ months. There is now a distinct advance in constructive power. Substantives and adjectives are freely put together. *Kabz—dati—klam—klin—.* (Cab's dirty, perambulator clean.)

M., 15th month. *"Papa gone."* *"Ama rsh?"* (Grandma, where is she?) *"Man—cow."* (a man on a horse) *"Mamma—a—man—bottle!"* (Mamma, see the man with bottles!) *"Sit down!"* (You sit down) *"Brush—hair."* (Brush my hair.)

M., 11 months. *"Papn—tn."* (The bread is gone.)

M., 17 months. The child has associated *ot* with hot substances, a something steaming. A month later, he was placed before Guildo's *Aurora*, and exclaimed "*ot*." He meant the clouds which, in his metaphorical mind, represented steam.

F., 20 months. *"Lulu—dai."* (Lulu ist da.) *"Lili—alden."* (Willie halte mich.)

"Run—away—man." (The man runs away.)

"Out—pull—baby—pecs." (Baby pulls or will pull out the spectacles.)

M., 3rd year. *"Mimi atta teppa pappa oi."* (The milk has gone on the carpet, and papa said 'Fie'.)

F., 16 months. *"Mos—ky—baby—shee."* Shouted with joy at going out to see the moon.

M., 15 months. *"Blow—lady—down—floor."* (The wind blew down a picture.)

"Mamma—broom—corner—sweep." (Saw a broom in the corner.)

F., 17 months. *"Mama—welche—appelchen—kaufen."* (Did mama buy apple for Alec?)

M., 26 months. *"Fallen—tuhl, bein—anna—ans."* (Fell against the chair leg upon which Anna sat.)

F., *"Baby—have—papa (pepper) no."*

French child. *"Papa—non."* (It is not Papa.)

3rd year. *"N (his own name) go in water, no."*

F. *"Bov (the name of her cat) dot tail; poor Babba dot no tail,"* proceeding to search for a tail under her skirts.

(3) *The Sentences with Inflections.*

The inflected forms of the sentence appear in the same recurring sequence that obtained in the differentiation of the parts of speech. Lindner's boy expressed plural number first during the 22d month. A month later he distinguished between *zwei* and *viele* (two and many). Mrs. Hall (34) observed the idea of number as early as the fifteenth month, and Ament (1, p. 166) observed distinctions in gender, number, and case as early as the twentieth month; in nouns and pronouns, as early as the eighteenth month, when the child spoke of herself in terms of the second person, *du* (you), and two weeks later she substituted the correct form, *ich* (I). In gaining command of this phase of the mother-tongue, one thing, says Professor Sully (78, p. 176), is clear,—“the child's instinct is to simplify our forms, to get rid of irregularities.” Striking examples of this are found in the use of the hetero-

geneous assemblages of different verb forms and in the use of the personal pronouns. The child reasons by analogy and the direction of the error lies often in being logically consistent. The weak form is often transformed to the strong form of verbs. The child says *scram* for *screamed*, *splat* or *splut* for *split*. Or the change may be the reverse, and say *eated* for *ate*, *seed* for *saw*; or it may join an adverb to a verb—in place of *fell down*, say *fall downed*.

The transition which takes place in a child in passing from the impersonal state, when it is simply "baby," to the state in which it speaks of itself as *I*, *my*, and *mine*, has been recognized by psychologists as the time when there is "a real advance towards the true self-consciousness." The child begins to use the personal pronouns during the first half of the third year. Preyer observed it during the 25th months; Pollock, during the 26th; Schultze, during the 19th; and Ament, during the 21st month. Rzesnitzek (68, p. 32) has observed that the child uses the possessive *mine* first. *Your* is often substituted in place of the object itself, or to denote possession, as *your bed*. Graf von Pfeil (63, p. 5) maintains—and this has been supported by other observations—that the child first masters the pronouns denoting second person, then those denoting third person, and last of all those denoting first person.

EARLY INFLECTED SENTENCES.

M., 22 months. "*There goes two little boys.*" "*Warren's apple is good.*" "*Mamma sit down, rubbers on.*"

F., 26 months. "*A hard saucer.*"

F., 32 months. "*That tastes more better good.*"

F. "*Rock my to sleep.*" "*Yes I are.*" "*Papa do.*" The child is asked, "Are you good now?" He answers, "*Yes I are.*"

F., 2¼ years. "*Papa eated dinnie.*"

M., 25 months. "*Gut is.*" (Es ist gut. It is good.) "*Bald kommen.*" (Ich komme bald. I will come soon.)

M., 26 months. "*Ich fortgagen Fliege.*" (I will drive away the fly.) "*Ein bissel (wenig) Wasser wollt ich.*" (I want a little water.)

M., 28 months. "*Bitte, ich eine Plaume geben.*" (Please give me a plum.)

F., 4 years. "*Die (Sie) hat mich nass gemacht.*" (She has made me wet.) "*Dem Papa ihr Buch auf der Mama seinen Platz gelecht.*"

M., 29 months. The child began suddenly, of his own accord, to count his nine-pins, putting them in a row, saying with each one, "*eins! eins!*" and later, "*eins, noch eins, noch eins.*" (one more.)

F., 33 months. "*Was für hubsen Rock hast du!*" (What a handsome coat you have!)

M., "*What I'm going to do?*" (What are you going to do?)

M., 34 mos. "*No two 'tatoes.*" (Only one potato left.)

M., 3 years. "*Where did you been?*" "*Did you went down street?*" "*Look at he!*" "*She hurt she finger.*" "*What time it is?*"

F., 4 years. "*What did her say?*"

4 SUMMARY AND PEDAGOGICAL DEDUCTIONS.

We have now traced the order of unfolding of the Language Interest in children through the first period, and have seen that a child during this period employs three different languages before it settles down to adopt the language of its mother: (1) The primitive language of the species consisting of sounds and signs—This form is purely instinctive, and serves to express the physical needs, and the lower order of emotional states. (2) The interjectional, onomatopoeic language, which consists of interjection and onomatopoeic reduplications. In this form, the initial impulse of expression is strengthened by the awakening of the impulse of imitation. (3) The mother-tongue, with its differentiated articulations and inflected forms. We have seen that the language parallels the physical development in its periods of rest and intensity. An arrest of physical development or a prolonged physical strain may cause an arrest of the language development. We have also seen that the fundamental impulses upon which the development rests—the instinct of expression and the impulse of imitation—culminate during the second and third years of life, and give rise to the primary language interest. Let us now turn to some of the problems which present themselves: first, problems of development; and second, problems of training.

If we turn to the records of those philologists who have observed the isolated languages which have suffered least by contact or by alterations in condition of culture in what Dr. Brinton (8, p. 392) calls the "baby-talk of the race;" and compare with these the records of the development of child-language in its evolution of sound utterances, of combining words into sentences, of vocalic mutation, of intonation, and of placement, all of which are steps indicative of the high form of specialization of our language; and add to these the differentiation of the parts of speech with their highly inflected forms, we find many striking examples in favor of the recapitulation theory. This view also places us in a position to appreciate, in a measure, the task in which the child accomplishes in a brief period of two years in learning to express its thoughts by means of this exceedingly complex form of reaction.

The child's early utterances abound in gutturals, the unmodified expulsion of breath which is characteristic of primitive races. But when it begins to imitate the speech movements of its environment, we at once see the operation of Schultze's law in the development of labials and dentals. Again, if we turn to the growth of the sentence, we see a similar conflict, which in precocious children very often leads to confusion and arrested development. But in spite of the fact that the child lives in a highly inflected language, its early words follow the line of the

race impulse, and are onomatopoetic and reduplications. Dr. Brinton (7, p. 308), Dr. Wilson, Dr. Wallace, and others have shown that the words *ma* of the Malay, *mamma* of the Romans, *ma* of the Hindoo, *naa* of the Tahalics, and *amama* of the Esquimaux, bear a relation to the *anne*, *mama*, *bababa*, and *ma* of the nursery, and have a functional similarity. The sentence among the Chinese, Professor Sayce (70, p. 137) tells us, is summed up by a single word. The mind, he says, has not yet clearly marked off its several parts and analyzed what we may call the early communism of speech. In many of the languages of the American Indians, the substantives and verbs are undifferentiated. Thus, Dr. Brinton says, *north* in the language of the Senecas is *the sun never goes there*, and this statement may be used as substantive, adjective, or verbal; in such cases the statement is expressed as one undifferentiated vocable.

These illustrations are sufficient to show the line of development for the child, and if development is to proceed normally, the child *must be at every stage of development*—a fact which Froebel recognized over a half century ago—*wholly what this stage calls for*.

When we turn to the matter of training during this first period, we find two classes of parents. There are those who, as the reports and returns show, belong to the more ambitious, and believe in putting the infants through a carefully planned course of voice culture. One observer reports that she took the infant of ten months, placed it upon her knee, and daily pronounced a certain number of sounds for the child to imitate in order to develop a soft and musical tone of voice. Another mother reports a typical case when she said: "Olive began to talk at seven months—she could say many words at eleven months. She was kept talking on all occasions, because she was thought to be a phenomenal infant. At last nature rebelled, and for one-half year she never attempted to say a word; when she began to talk again, the liquid baby prattle had grown harsh and awkward. *Papa*, one of the first words she ever said, became *baba* at two years of age; and not until she was five could she sound *k* and *j* in *kitty* and *Jack* as when she was a mere baby. Physicians who examined her at the age of four said the vocal organs had been overtaxed and were injured in consequence. She picked up the sounds gradually; but the sounds which she had said earliest were hardest to regain." Another mother is reported to have addressed her son, aged twelve months, thus: "It is your duty to go to sleep when I tell you that the time has arrived. So, my son, you will lie still." In all seriousness she was exceedingly distressed when the son said, "Thaw a thweet butterpy thucking thugar out of a power." In the second class of mothers, there are those of

penetrating sympathetics, on whom the wandering eyes of the infant first steady, for whom the vacant face first breaks into a smile, and to whom the first response of crooning and nonsense syllables have a meaning of their own. It is this class who instinctively appeal to nature's methods. When a child fails to catch the radical sound of a word, it is these weak parents, says Dr. von Martius, "who, instead of accustoming it to pronounce the word correctly, will yield, perhaps, themselves and adopt the language of the child," which gives rise to "baby-talk." This universal form of language has been generally condemned. Dr. Gutzmann believes, "there is much sinning in this respect by adult persons constantly indulging in so-called 'baby-talk' with children. Later, when the child goes to school and begins to notice that it is lacking in this respect, it becomes the object of mockery by other children; and this inheritance from the nursery may have an injurious effect on its speech, and even on its character and its future life." Specimens of modern "baby-talk" give proof of cases of arrested speech development without doubt due to this practice.

Boy, 3 years. "No-no nee! Tee-tee Weewie no no go out of houzie if you nee." ("Do not cry! Little Willie will not go out of the house if you cry.") "The tee-tee bow-wow nees." ("The little dog cries.")

Boy, 4 years. "Ikky haw a 'icley ha ha hitchey—hitchey 'yong 'le t'eet an' hoppy on a po-po 'ickle waggy."

Boy, 2 years. "Thaw a thweet little butterpy thucking thugar out of a power." ("Saw a sweet little butterfly sucking sugar out of a flower.")

Boy, 6 years. "Mamma 'panked I."

Boy, 4 years. Called a cow "hoony," a dog "waggy," a horse a "ha-ha," a nut a "c'acker," his nurse "wow-wow," a banana a "parson."

Girl, 2½ years. "Me ee oo." ("I see you.") "Ou ah en dahi." ("You are in dressing.")

No psychological study of "baby-talk" has been made of which we are aware, and we need more observations to establish its function. If the essay of John Fiske on the Lengthened Period of Infancy has any validity, then the mothers who are unduly hastening the development in the language of infants are "sinning" against the laws of growth in forcing the higher forms of language before the lower are organized, as the second class is "sinning" in causing the lower forms of language to survive "as pensioners of the soul" beyond the normal time, thus producing arrested speech development.

The proper training lies between these two extreme points. Many observers speak in favor of "natural baby-talk," or the use of diminutives, since this form is an appeal to nature's methods and instinctively places the mother in sympathetic relation within the range of the child's language experience. The diminutives so common in child and primitive languages

follow the law of reduplications, and they are also the expressions of the tenderest emotions. Both the golden age of childhood, and the golden age of love exercise a remarkable influence upon language in the use of diminutives, and friends sometimes use this form of speech toward each other. "Mothers in talking to their children, sometimes friends in talking to each other," says Montegazza, "thus lessen themselves in a delicate and generous manner, in order that they may embrace and be absorbed in the circle of the creature they love."

If, then, the use of diminutives is a natural form of expression, as it appears to be, upon which the vocal organs are to practice for the more difficult combinations of sounds which are to be sloughed off when the step has been taken; or if that form of language expresses the emotional state better than any other, its importance from a psychological point of view as an element in training must not be neglected.

SUMMARY.

1. Keep the child in a healthy physical condition.
2. Give freedom to the movements of the organs of respiration.
3. Keep the child in a sympathetic frame of mind that its impulse to imitate may be at its best, that is, unconscious, and never call attention to errors.
4. Beyond this, science has but a single suggestion: "Let the child alone, and set it a good example" in clear and distinct articulation, in a rich language environment. The instinct of expression and of imitation will do the rest.

II. THE PERIOD OF CHILDHOOD.

The second period of the language interest extends approximately from the third to the eleventh or twelfth years. Observers have generally recognized two quite distinct periods: first, a period of continued rapid growth from three to seven; and second, a period of rest and re-adjustment from seven to eleven or twelve.

I. THE PERIOD OF CONTINUED RAPID GROWTH.

According to Wundt's general law of growth (91, p. 242), this period arises in the elements of the earlier one, and develops gradually into a new creation in comparison to it. The rhythmic, the spontaneous, and voluntary expressions possess each their peculiar forms.

Physical growth continues at a rapid rate, likewise the brain in weight and organization (Betz, Flechsig). The senses are especially alert. The vocal organs, according to Garbini (24, p. 53), grow during the third year to cause a differentiation of

the two registers, the tones become more individualized, and the first sex differences appear. From the third to the sixth years there is a well marked vocal extension of four tones for girls and five for boys.

Psychologically, this is a period of peculiarly intense activity, which, Sikorsky (75, p. 53) says, is characterized by a general development of all the activities of the soul; it is essentially a period of mental expansion when color, form, number, and space relations begin to dawn. The soul extends its boundaries from the narrower, individual self to a larger, more social self. The child has become conscious of its own body, and is able to distinguish between the *mine* and the *not mine*. But this is also a period when the external impressions tend to unify the processes of the emotions, intellect, and will into a personality, the worth of which, says Sikorsky, does not depend upon the extension and strength of the single manifestations of the soul, but much more upon the harmonious fusion of all. The child's mind, like a sponge, is always thirsty. And one of the earliest symptoms of this, the vegetative period of the soul, as shown by the study of *Curiosity* and *Interest* (33), is in seeking the acquaintance of everything and everybody. "Curiosity is the apparent, now partial, now dominant, motive in many fields." So great is this curiosity to see things that it even leads to truancy and runaway, as shown by Kline. In the field of language, this thirsting of the soul for life and experience is apparent, first, in the dawn of the Questioning Age; and, second, in the interest shown in myths, fairy tales, stories, etc.

(1) *The Questioning Age.*

This period begins gradually during the third year of life. Pollock observed the first question at twenty-three months; Preyer, at twenty-eight; Lindner, at twenty-six; and the writer observed the first question at twenty-five months. But the true age of inquisitiveness when question after question is fired off, says Professor Sully (78, p. 75), with wondrous rapidity, and pertinacity seems to be ushered in with the fourth year. Out of a total number of 1,227 cases of curiosity in children reported by Drs. Hall and Smith (33), 44.41% attempted to satisfy their mental longings by asking questions. The early and simpler forms of questions are questions of fact, of substance, action and place. *What? Where?* In these may be seen the blending of the child's observation and half-conscious process of reflection, and it turns to adults to satisfy the cravings of its mind. One observer states that while out in the field with a four year old boy he missed a butterfly which he was attempting to catch, whereupon the child asked, "Where is the but-

terfly gone to, uncle?" He answered, "I don't know." The child, looking somewhat crestfallen, said, "I thought, uncle, you knew everything." The child soon becomes conscious of the fact that objects have names, and every member of the family has its individual name, and consequently it immediately sets about to inquire the names of every individual object about it. Girl, 2¼ years. "What's this dog's name?" "What's this book's name?" "What's this pencil's name?" One feature in this fact-gleaming kind of question, says Sully (78, p. 76), is the great store which the child sets by the name of a thing. The naming of predominants (agents, objects or actions) is, according to Lloyd Morgan, the first great step of independent life in the course of mental evolution. Here is seen the germ of the child's analysis which isolates the action and object thus named and causes it to float off by its sign. "Body and mind," says Morgan, "became separable in thought; the self was differentiated from the not-self; the mind was turned inwards upon itself through the isolation of its varying phases." A sign, to use Sir William Hamilton's phrase, is necessary to give stability to intellectual progress. The second form of questions is directed toward the reason and cause of things—the "why?" This form develops naturally out of the earlier; for to give the "what?" of a thing—that is, its connections—is to give the "why?"—that is, its mode of production, its use and purpose; and it is the beginning of the soul's groping its way backward to find the origin of things. The "why?" says Sully (78, p. 80) takes on a more special meaning when the idea of purpose becomes clear. And here the anthropomorphic attitude appears; when the child learns that his own actions are controlled by a desire to get or to avoid something, the idea of the result of an action precedes and determines the action.

EARLY FORMS OF QUESTIONS.

F., 2¼ years. "What's that?" "What's in there?" "Where's mamma?" "What's mamma doing?" "What's the matter, mamma?" "What's this book's name?" "What's that pencil's name?" "Was it raining in the night?" "Will it rain this night?" "Is that papa's old hat?" "Is the moon out there?"

M. "What is this flower?" "What is this insect?"

M., 28 months. "Where is Mima?" "Where is ball?"

M., 26 months. "Can I eat those?" was asked when he saw some fruit which had been brought from the garden. *Where* is his first definite interrogative.

F., 29 months. While sitting upon the couch, she asked, "Where is the lady-bug?" (Having seen a "lady-bug" upon the window a week previous) Answer: "I suppose it has gone into its hole." "Where's the man-bug?" "Where's the boy-bug?" "Where's the girl-bug?" "Where's the stove-bug?"

M., 3¾ years. "What does frogs eat, and mice, and birds, and but-

terflies? and what does they do? and what is their names? What is all their house's names? what does they call their streets and places?" Since then he has flooded us with innumerable questions, and mostly unanswerable. "What holds the stars up?" "Where does the sun go to?" Answer: "God." "Who is God?" "Will God be along here pretty soon?"

F., "Why does it rain?" "Why is there summer and winter?" "Why is Flossie's hair curly?" "Why isn't it always sunshine?"

M., 34 months. The word *why* appeared first in a question. "Why go home? I don't want to go home." "Why is the wood cut?" "Why do you clean the flower pots?" "How is that done?"

F., 4 years. "Where does all that I eat go to?"

F., 18 years. I remember as a child asking, "Why is a table called a table and not called cheese?"

F., 18 years. I was five years old when I went to stay with a blind uncle in the country. The next morning after my arrival he took me to the Post Office. It was then I began to see things and to ask questions. "How can you see where to go?" "What made you blind?" "Why are farm houses painted white?" "What will the dog do if the cow looks at it?" "Why are farmer's fingers so fat?"

M., 3½ years. "Who made papa poorly?" "Is this a poorly gentleman?" "No." "Is that a well gentleman?" "Yes." "Then who made him well?"

F., 4th year. L. saw a balloon (toy) growing smaller from day to day. She said, "That balloon is growing smaller. The air is going out." She heard about the children's being confirmed, and asked? "Where are they confirmed? here? here?" pointing to different parts of her body, "Is the pastor confirmed as well?"

F., 2½ years. Questions of time relation: "Is it morning now?" "When is it noon?"

F. As a child, finding a hole in my shoe, I asked my father the following questions: "What made the hole?" He answered, "Why, because the walk is hard." "What made it hard?" "The tar." "What's tar?" "Something to make walks with." "What do they make walks with it for?" "For us to walk on." "What do we walk on them for?" My father was now getting impatient, so he told me it was time for me to go to bed.

(2) *Interest in Rhymes, Myths and Stories.*

Another evidence of the activity of the child's mind is seen in the intense pleasure derived from stories, rhymes, or melodies which are told to it. Professor Jegi (43, p. 243) reports that between the nineteenth and twentieth months *Mother Goose* had been read through and through scores of times. Whenever the child asked for a story, her wish was granted, and many of the rhymes and jingles could be repeated by her without mistake. She even repeated them with book in hand to other children. Mrs. Hogan (39, p. 84) records that during the third year her boy asked her to sing "Moller Goose—fol-la-three-birds." "I think," says Mrs. Hogan, "I sang it over at least two dozen times. He kept repeating, 'More!' and kept time with his finger, sometimes singing with me. When he wants me to sing, he specifies what he wants." One hundred seventy-five students sent returns based upon observation

and reminiscence in answer to the question, "When are signs of an interest in *Mother Goose* melodies, rhymes, or fairy stories first noticed?" All, without an exception, report a keen interest in children beginning during the third year, and growing in intensity with age. The interest, according to these returns, centres in *Mother Goose* melodies, rhymes and jingles in which there is movement and dramatic effect during the earlier years, and passes into the counting-out rhymes, fairy tales, and myths which predominate during the years from five to nine. The stories most preferred were *Little Red Riding Hood*, *Little Golden Hair*, *Cinderella*, *Jack and the Bean Stalk*, *Jack the Giant Killer*, *Alice in Wonderland*, and stories of Santa Claus. That there is a real passion of the soul for myths and stories is further shown in children who have been left to themselves a great deal. Under such conditions, alone with Nature, they have shown a myth-making impulse. Monteith (56, p. 208) has set down the record of a child three years of age in his family, which illustrates this passion. "It was on the bluffs of the Mississippi River," says Mr. Monteith, "she had no companions of her own age, and was allowed to ramble about the grounds alone. She was seen to create a fairy world for herself. An old stump was invested with an evil spirit named *Spunt*, another stump was the sanctuary of a similar spirit, *Nessman*. In a rock-pine cone was embodied the friendly spirit *Rock-pine*. At different trees and clusters of shrubs she located the fairy people, all known by names of her own creation,—*Mrs. Knickerboc*, *Mrs. Purple*, *Mrs. Chary*, *Mrs. Yellow*, and her deceitful son *Yelly Yellow*. These people transgressed the laws of Nature with utmost license, and were daily brought into dramatic action. Conversation was put into their mouths, and incidents, situations, and conflicts created for them." Another observer in Babyhood states (11, p. 320) that her boy never tended or caressed his doll. She was more like a puppet than a doll to him—simply a subject for his imagination to work upon; and his manner of playing with her was generally to leave her alone and untouched, and simply talk about her. "Miss Rose," as the doll was called, "has committed every possible childish fault and suffered every possible punishment," says the mother; "she has steeped herself in crime of a more serious nature, such as murder and arson; she has visited foreign countries; she has been rescued from burning houses; she has married many times; she has been in prison; she has been an actress, and even a cannibal. She lives in a certain Pigtownville where most of her adventures occur."

The imagination of children has carried them farther than this. Mr. John Fiske reports a boy four years old who conceived the snowy clouds of noonday as white robes of angels

hung up to dry; and a girl who asked whether she must take a balloon and go to the horizon and climb up to the sky to reach the place where God lives. Another observer states that his boy three years old wanted to climb to the sky, break a hole through, and sit in God's lap.

INTEREST IN STORIES.

F., 19 years. As far back as I can remember, I have always had a great love for story-telling. When about three years old, I lived near a large pine wood. It was my great delight to have my older sister take me into the wood, on summer days, and tell me stories. She always had something new to tell me. After once hearing them, I could repeat them, and it delighted me to think about them.

F., 20 years. When a little girl, I could sit and listen for hours to the stories mamma told me every evening. Sometimes it was a nursery rhyme, sometimes a story of the Christ Child. It was a severe punishment to have her refuse to tell it when I had been naughty during the day.

F., 20 years. When a little child I was very imaginative, but did not use my imagination to any great extent in story-telling. I used it to protect myself from some punishment or trouble.

F., 18 years. When I heard the story of *Jack the Giant Killer*, I thought it was a beautiful story. I thought the giants as big as trees, and believed that they still lived in forests.

F., 21 years. One Christmas I received a large doll. The same day my playmate showed me her doll. I said, "Oh! my doll is five times larger." The truth of it was that my doll was but a very little larger, only it seemed larger.

F., 19 years. When a child, I saw a small grass snake. I ran into the house and said that there was a snake as big as a broom.

F., 20 years. When small I helped my brother kill a baby snake. I told that we had killed a great big striped adder. I did not feel as though I was lying. It did seem large to me.

F. At five, *Mother Goose* was my delight. Its ridiculousness and its jingle strongly appealed to me. There is nothing little to a child. My great troubles could not easily be pitied or kissed away; but give me *Mother Goose's* cheery logic, and I could send them off myself in womanly fashion.

F. When a little girl, I had but few companions. This, however, was of little consequence, as I had a group of five or six imaginary playmates. These were very distinct individuals with names, as Violet and Kate, and with decided personal characteristics. We played all sorts of games and roamed all over the grounds together. I never thought of telling any one about them; they seemed a part of my own individual world which I could not transfer to others understandingly.

F. The most vivid memory of anything as a child is of a continuous story. When the shades were partly drawn, my friend and I would sit down on the floor and tell our story. We took turns, trying to divide the time equally, and then each one tried to out-rival the other by prophecies of the beautiful things that were going to be ours when we grew up to be princesses.

(3) *Interest in Words.*

Again the language interest may be seen during this period by the interest in new words—a continuation of the imitative

sound impulse of the earlier period. As Miss Williams (85, p. 274), Mr. Conradi (18, p. 359), and others have shown, children delight to use new words, and words of peculiar sounds. "Whenever at six or seven," says Miss Williams, "my niece, Helen, heard a word that attracted her attention, she used to say it softly to herself many times. Thus, after practicing the word *diarrhœa*, I heard her say to one of her dolls: "Come here, Diarrhœa, my dear." On another occasion, she told me that her dolls had two gods, *Diphtheria* and *Diarrhœa*. Sometimes she would pour forth a steady stream of words, for the most part nonsense, lasting for an hour or more. This charm was due to the pleasure she derived from the sound and the act of speaking. Such words as Sheherezade, Badrul, Boudoin, Marie Antoinette, Adelaide, appeared to give her special pleasure." The same fact is seen in the case of Professor Stumpf's boy aged five years (77, p. 419). He had received a set of lettered blocks containing both small and capitals in both German and English script. He arranged these into families, giving to each a family name. Thus, Z, B, and g were called "Turn-family" (Dreh-F); p, "Tail-family;" M, "Nice-family" (Schön F); H, "Stork-family;" etc. He had about thirty different families which he retained for three months, when the passion was diverted. Soon after, the child became interested in counting, and numbers, even the addition, subtraction and multiplication of numbers became of such absorbing interest that he made simple problems involving these operations, and solved them correctly. Another form of the interest in symbol forms is reported by Margaret C. Whiting; when about eight years old, she began to think the numerals as individuals and not as abstract symbols. 1, 2, and 3 were children. 4 was a woman, etc. Dr. Krohn, Galton, President Hall, President Jordan (44, p. 36) and Miss Calkins (10, p. 439) have reported many cases of color association with letters, words, and sounds with names of persons, months of the year, and days of the week. After consulting five hundred and twenty-five students, Miss Calkins concludes that "it is at least certain, as the table shows, that almost all color associations and forms date back to childhood."

Another illustration, which shows the peculiar form that the interest in words may take, is reported by Fannie E. Wolf (89, p. 141) in the case of a seven year old boy who had written a dictionary containing two hundred and fifteen words. The boy had spent two years in* a kindergarten, but had had no suggestion. The idea, it is said, as well as the work, was entirely his own, and when completed it was submitted to his parents. Of the 215 words contained in the dictionary, 42% are nouns, 30% are verbs, 10% are adjectives, 4% are prepo-

sitions, and the remaining 6% is distributed among conjunctions, articles, participles, and one abbreviation, *I'll*. The definitions are invariably given in the form of sentences, usually including the word defined, and expressive of some action or use of the thing. The dictionary is also abundantly illustrated where an illustration will serve to convey the image.

Aunt—is a little insect that is black, creeps around in sand.

Bell—is something that if you shake it rings.

Basket—is to so or for papers.

City—is a place like New York.

Circle—is a round thing like this (illustration).

Drum—is like this picture to hit with sticks.

Fuss—is if you have a quarrel with anybody.

Kind—is if you give things away, then you are kind.

In—is if you put egg in a box.

Vain—is if you are always look in the glass.

Old—is not new.

Saw—is if you see something after you saw it.

INTEREST IN WORDS.

F., 7 years. Asked questions: "Which do you like best, Rowena or Revena, Gladys or Evelyn?" When answered that Evelyn was a little the prettier, she said "I think so, too, because it sounds like Agraël playing upon the harp."

M., 6 years. He arranged lettered blocks into families with family names: *S, B, g* was called "turn-family" (Dreh-F); *p*, "Tail-family" (Schwanz-F); *M*, "Nice-family" (Schön-F); *N*, "Noisy-family" (Sans-F); *F*, "Standin-family" (Stehdrin-F); *D*, "Einbauch-F;" *H*, "Zweibauch-F;" *H*, "Stork-family," etc.

When about seven, I delighted in new words, not so much in using them as in saying them over to myself.

Jordan. There are certain powers possessed by childhood, which grow weak or disappear with advancing age or wisdom. One of these is the ability to recognize shades of color in ideas or objects which can have no color at all. In my childhood, I always associated the idea of color with the letters of the alphabet. The letter *R* always called up the idea of greenness. *S* was yellow; *A*, scarlet; *V, D, Y, K, W, M, P*, were blue; *O, C*, white; *I*, blue-black; *M* and *P*, lead color; and *Q* was almost colorless.

Dr. Karsten recognized the colors in the various vowel sounds.

(4) *Language Expression and Form.*

If we turn to the side of expression, this period is essentially a stage of *spontaneous play* upon sounds of words, combinations of words, rhymes, jingles; the sentences are often incomplete and incoherent, very direct, often omitting the parts which do not suggest concrete images. There is an incessant flow of words and gestures. Mrs. Trettien set down on February 3rd, 1904, every word spoken by H., aged two and one-half years, during the period of one hour. The child was busy at play about the house with dolls and other playthings. During this hour which was a typical hour of the day, 2:45 to 3:45 P. M., she used 1,068 words in 217 different sentences or exclamations,

involving 180 different subjects. Of this number, 49 were questions. Some of the sentences were repeated in rapid succession six times.

Mr. Gale (25, p. 102) reports the case of a boy who on the 182d day of his third year used a total number of 9,290 words, and 479 different words, and another boy who on his second birthday spoke 805 different words and a total number of 10,507 words. In the number of repetitions of a single word, Mr. Gale found that one boy used his own name, "Sammy," 1,057 times on one day during his third year (as subject, object, and possessive, and in place of personal pronouns); and also the case of a girl who used her favorite "little" 660 times, "that," 609 times, and the aggressive *ego* words, "I," "me," and "my," 970 times in one day. Mr. Sanford Bell (3) also counted the words used by his two children, aged $4\frac{2}{3}$ years and $3\frac{1}{2}$ years, respectively. The older used 14,996 words; while the younger used 15,230 words in one day. He also found that the rate of speech was accelerated at times, and retarded at others, like the general activity of children. While these results are still very unsatisfactory, yet, they do, in a measure, mark the amount of energy which the child puts into his language practice.

It may be well for kindergarteners to consider this enormous activity on the part of the child, and not enforce silence and suppression to a point of causing arrested development.

The child's drawings furnish a good illustration of expression. To the child, drawing is a language which follows the line of its spontaneous impulse and expresses the child's thoughts regardless of the way the physical copy appears to the eye. A few simple lines are sufficient to represent a man or other creature. Often there is undue emphasis placed upon some minor detail, which momentarily catches the fancy, distorting the representation. Another feature which invariably appears during this period is the faithful delineation of more than is visible in the order of nature. The legs of the traditional man are displayed through the nether garments, and if astride a horse, the body of a horse does not obscure the view of the farther limb.

The child's spontaneous flow of language is usually very free and easy when accompanied by dramatization during this period. Its story fabrication knows no license; thus, Sully (78) mentions a boy three and one-half years of age who began the description of a dog by laying on a miscellaneous pile of color-adjectives, blue, red, green, black, white, and-so-forth. "With a similar disregard for verisimilitude and concentration of the aim of strong effect, he would pile up the agony in a story, relating, for example, how the dog had killed a rabbit

("bunny"), had his head bitten off, was then drowned, and so on, through a whole Iliad of canine calamity." The form of expression is, however, direct, definite, using short and simple or loosely connected sentences, which emphasize the mountain peaks of thought, with the lesser important words entirely dropped out, nor does the child miss these words, as Professor James has shown. But when listening to a repeated story, the child's exacting memory demands full, unvarying details. The reality of the story does not as a matter of common observation admit of even the slightest change, and a single repetition of a verse of several lines is remembered without difficulty.

H., 2½ years. Remembered the subjects of ten different pictures by a single study of them.

The spontaneity may also be measured by a somewhat fixed cadence which suggests that expression is not merely in response to the sense impressions, but also in response of something akin to a deeper poetic feeling.

F., 2½ years. Repeats prayer,—

"Now lay me down t'heap (sleep),
I pay ye Lod—hol (soul) I' keep,
I should die, fore I wake,
Pay ye Lod my hol la take."

F., 3¼ years. Repeats story of Little Red Riding Hood as follows: "Are flowers. Red Riding Hood picks. Basket in kitchen, meat, wine. Basket carry. Can Wolf come? Wolf is coming. Wolf runs Grandmother. Wolf comes into room. Wolf whip. When wolf is dead."

F., 4½ years.

"The beautiful trees are here,
And Christmas is everywhere,
And the birthday will come again,
Father, mother, and baby saucepan."

In this rhyme there first appears a deeper emotional tone which clearly shows that the child's life is in *rapport* with nature; but the lines close with a nonsense jingle. The same child when looking out into a garden of calla lilies in the morning sang:

"The lilies and the lamps are lighted,
And the moon and stars are shining,
And the leaves are falling down,
And the wind is blowing, O, so hard.
The flowers love the dew,
The flowers love the wet.
All the pepper flowers are blowing hard,
And the lilies are blowing hard,
And the dew is wet."

On a rainy morning the same child sang:

"All the trees are shining,
And the morning is sitting on the sky,

And the dew is coming, is coming,
And the rain is falling
Where the sun is gone."

Boy, 7 years. A poem to his teacher.

"The donkey, the donkey,
He put on a white cap.
The donkey, the donkey,
He put on a white cuff.
The dog, the dog,
He danced a jig,
The cat, the cat,
She caught a bird."

As the child grows older, its ideals change; its play becomes more socialized, and the language interest changes as well. The rhymes of Mother Goose, of jingles, of Nature myths pass on to the counting-out rhymes so common among children. Mr. H. Carrington Bolton (5, p. 31) has collected nearly nine hundred examples in use among modern civilized and semi-civilized races. Of the rhyme beginning, One-ery, two-ery, ickery, Ann, he has found thirty variants. Mr. Bolton says, "the customs connected with the counting-out, as reported from all parts of the world, and even the rhymes themselves, have many features which are strikingly similar. The doggerels are similar in their rhythm, in the rise of numerals, in the admixture of gibberish with words of known meaning, and in the application to the custom of counting-out." The important element in these rhymes which appeals to children is the dramatic, a combined effect of voice and muscular expression.

SPECIAL FAVORITE RHYMES OF DIFFERENT NATIONS.

American.

Ena, mena, mina, mo,
Catch a nigger by the toe,
If he hollars, let him go,
Ena, mena, mina, mo.

German.

Ene, bene, dunke, funke,
Rabe, schnabe, dippi, dappi,
Käse, knappe,
Ulle bulle ros.
Ib ab aus,
Du liegst draus.

Scottish.

Eatum, peatum, penny pie,
Babyloni, stickum, stie,
Stand you out thereby.

French.

Un, deux, trois,
Tu ne lés pas,
Quatre, cinq, six,
Va t'en d'ici.

Even the more serious poems which children choose at this age are those in which the rhythm and life are especially prominent, as Dr. Wissler (86, p. 523) has shown, children caring less for sentiment and thought. The following little rhyme is a favorite:

"Two little kittens one stormy night,
Began to quarrel and then to fight."

When we turn to a further analysis of the material thus far presented upon this period, we find that the development of the language interest rests upon and can be traced in the growth of the personality. With the development of memory, attention, and will, the naming impulse gathers up those various elements and experiences, more or less consciously, which constitute the "empirical I" with its individual stream of interests. The mind in its rapid growth entirely naïve, unfettered by convention and tradition, seizes upon the sense-experience and appropriates it. Childhood is the age of fancy, dreaming, and make-believe. It pushes out into the unknown, as we have seen, with questions and longings and builds about its meagre stock of knowledge a halo of splendor. In all this, we can catch a glimpse of the child's anthropomorphic way of looking upon the world. Things animate and inanimate are possessed of life similar to its own. Nature becomes a great drama whose actors are as real as life itself.

PERSONIFICATION AND DRAMATIZATION.

M., 20 months. Conceived a special fondness for the letter *W*, addressing it thus: "Dear little boy, *W*."

M., 4 years. While tracing letter *L* happened to slip, changing to form an acute angle, thus *V*. He instantly saw the resemblance to the sedentary form, and said, "Oh, he's setting down!"

F., 2¼ years. H. impersonated a little baby's manner of walking,—"This is the way baby Ruth walks." At the same time she walked about clumsily, swaying from side to side. She constantly speaks of herself as a little baby, and often creeps on her hands and knees.

F., 1½ years. She called a sheep *Mama-ba*, and a lamb a *Ilda-ba*, having called her smaller brother *Ilda*.

F., 4th year. She talks much of God. Says, "I am the dear Lord." Shakes the curtain and says, "The dear Lord lets it rain."

M., 2 years. When caught red-handed in mischief, he would, when scolded, unhesitatingly name some one else as the culprit.

M., 3¾ years. His father told him if it rained he would not be able to go to the circus, for nobody could drive away the rain. The child instantly replied, "The Rainer can." When asked who this wonderful person was, he replied, "A man who lives in the forest, *my* forest, and has to drive the rain away."

M., 3rd year. The child got hold of some cabbage stalks and amused himself with making them represent different persons visiting each other.

F., 3½ years. Covers her face with a veil and says, "Papa, where is Lucia? I am not here, I am in Auenau (Argenau)."

Reported by Miss Calkins: Letter *T* is generally an ungenerous creature. *W* is a soulless sort of thing. *4* is honest, but mathematically angular and ungraceful. *3* is untrustworthy, fairly good-looking in personal appearance. *9* is dark, a gentleman, tall and graceful, a friend of *L*. *N* seems like a maiden aunt, sister to *M*. *A* is odd and stands by himself, an eccentric middle aged man.

An imaginary *John* is held responsible for everything objectionable in the house.

F., 6 years. I once happened to overhear a little girl of six talking to herself about numbers in this wise: "Two is a dark number; forty is a white number."

(5) *Summary and Deductions.*

There is no problem in the development of the language interest which has provoked more discussion than this one of the myth-making impulse in which the imagination, in its parables, fables, allegories, fiction, and play, takes such unlicensed liberties, even to gross exaggerations and positive prevarications. One parent asks, "How far is it advisable to encourage an imaginative child? If encouraged in these things, will it not be a fruitful source of telling things that are not true as he grows older?" Another says, "I never allow my child to hear or tell anything but that which is true." To see the full significance of the myth-making impulse, let us take a broader view. "The yearning to know," says Major Powell (64, p. 19), "is universal." "In savagery, in barbarism, and in civilization alike, the mind of man has sought an explanation of the changes in nature. 'How' and 'why' are the questions asked about these things. They are questions springing from the deepest instinct of self-preservation. The movements of heavenly bodies, the changes of seasons, the succession of day and night, the powers of the air, the majestic mountains, the ever flowing rivers, the flight of birds, the gliding of serpents, the forms of storm-carved rocks, the growth of trees, the blooming of flowers, the mystery of life and death, and in all the operations of nature, man's weal and woe are involved. A cold wave sweeps from the north and rivers and lakes are frozen, forests are buried under the snow, and the fierce wind almost congeals the life fluid of man himself. At another time, the heavens are brass, the clouds come and go with mockery of unfulfilled promises of rain, the fierce mid-summer sun pours its beams upon the sands, and blasts heated in the furnace of the desert sear the vegetation; the luscious fruits shrivel before the eyes of famishing men!" According to Major Powell, there are two grand periods of human philosophy, the mythical and the scientific. In the first, all phenomena are explained by analogies derived from subjective human experiences; in the latter, phenomena are explained as orderly successions of events. In the philosophy of the immature mind, the objective world is an extension of the subjective without a line of demarkation; the outer world is classified by their analogies with the subjective. Primitive man measures distance by his own pace, time by his own sleep. Noises are voices, powers are hands, movements are made afoot. All nature is personified. Hartland (36) has summed up the psychology of myth-making as resting upon,—(1) limitations of the individual's experience and knowledge of the facts which he sees occurring about him, (2) the mental attitude (curi-

osity) which these mysteries of life produce in the mind, and (3) the interpretation of nature in terms of his own consciousness. The subject says Wundt, not only sees his own sensations, emotions, and voluntary movements reproduced in the objects, but even his momentary affective state is in each case especially influential in determining his views of the phenomena perceived, and in arousing ideas of the relations to his own existence.

Every primitive race has its sagas, ballads, legends, popular rhymes, folk-lore, myth, fairy-tales, or stories of its heroes, which, according to the German mythologist, Kuhn, began to be framed the moment the people consciously recognized the existence of such unseen agencies. They were founded on visions, dreams, and those vague mental states which fill up so large a part of savage life. They were told by professional story-tellers to entertain and instruct a listening group, sitting about the fires; or by the older men, lying and bragging, after the manner of story-tellers, recounting their feats in war or the chase.

Story-telling among civilized people is almost a lost art. From the returns there came a response which testified to the fact that children enjoy listening to stories in the quiet evening hour, and in many cases enjoy repeating the stories to themselves, their fairy companions, and even to adults. This is a typical response from a parent: "I have practised a while on the idea of story-telling for the entertainment of the never ending source of amusement of the little folks, and am convinced that 'it pays.' I am only troubled by a lack of native genius, and must fall back on books which always disappoint the listener." To the savage it is no figure of speech to call upon the sun to behold some heroic deed which he has committed, nor is it to the child who looks out at the moon and says, "Moon hides her face behind the clouds;" or "Rain, rain, go away, come again some other day." One observer says, "When I was a child and heard thunder, I thought it was the voice of a man behind the clouds." To the child as to the primitive man, this fairy-land is very human in its conception and organization. Its inhabitants live much as human beings do. They eat and drink, they love and hate, they are grateful for benefits received, and reward a kindness. But they do not forget to avenge a wrong or an offence. This fairy-land is more than human, since its inhabitants are neither bounded by time nor space. They possess unbounded magical power and heroic qualities which far excel human attributes. Nor are civilized people so far removed from this spirit of animism. Civilized man still kicks the stone which bruised his foot, and our poetry abounds with it, and has so far kept it alive in

appropriate metaphors and similes. We can, then, in the realm of the mythical and make-believe, see something of the longing of the soul of childhood and primitive folk as it tries to seize upon and understand the world of sense. The dominant activity (imagination) during this period, as Ribot says, is not adulterated by the intrusion and the tyranny of the rational elements. We have probably not yet begun to realize the importance of this period in the development of the language interest. For it is here that the attributes of things coagulate and float off in the mental nebula and become attached to some purely mythical being, to a Santa Claus, a doll, a pet, or what not, with all the eccentricities and peculiarities, without reference to time or space, which is, however, simple and lies within the child's mental grasp. As the child's personality grows to take in the family, the school, and community, the ideal must climb steadily by transferring and extending these attributes from the imaginary character, from Santa Claus, dolls, pets, etc., to parents, brothers, and sisters, and mates of the school and community. If this view be correct, then some of the training which children are receiving to-day is not in harmony with child development, since many intelligent parents look upon the stories of Santa Claus and child-mythology with suspicion, because "they are not true." One conscientious mother writes, "I cannot account for the fact that my children have a desire for the blood-thirsty stories of *Jack the Giant Killer*, *Little Red Riding Hood*, and similar blood-thirsty stories, when the sight of the real article, blood, sets most of them to quivering." "I believe," she continues, "that *Jack the Giant Killer* and similar stories should be as carefully kept from the little children as the cheap dime novel is kept from the growing boy until the desire for good, wholesome stories is formed." An observer reports, "When I was a child, I used my story-telling to protect myself from some punishment or trouble." In answer to some of these difficulties, we can but refer to the fundamental law of growth which appears in all life, the law of adjustment as set forth by Paola Lombroso (48, p. 379): "The law of the economy of effort subordinated by that of the protection of the *ego* (moi)," says Lombroso, "is the great law of the psychological life of the infant." This law is very well illustrated in the development of language. In general, the *sensory* development precedes the *motor*. The infant, we saw, had definite ideas sometime before it could express those ideas by means of vocal language. It could recognize the source of its food and members of the family before it could call them by name. So the child may build, indeed must build, out of its sense-experience many "air castles" before it can give a crude description of a single one, whether by voice or gesture. The

motor development in language experience is so slow and sluggish that it holds in check, for want of ability to express, excursions of the mind, until experience with life itself causes it to discriminate between the real and the fictitious. The real danger appears to come from the other direction; namely, insufficient and unsuitable language material which lies within the range of its experience out of which the mind can build large and varied speech co-ordinations. For, if myth and folklore are withheld during the early years, and reading, which is slower still than speech, is forced upon the child at five or six, and a year later writing, which is still a more cumbersome mode of expression, we may appreciate something of the influence of these slower forms of expression in retarding the growth of thought and language powers, thus causing arrested development. If to this we add the criticism which has been expressed by Dr. Harris, that the child is drilled in such combinations as, "A fat cat sat on a mat. He had a rat, etc.," until it loses its sense of euphony, and acquires a habit of making English sentences with villainous cacophonies. "Here," says Dr. Harris, "is produced a fixed habit, an arrested development of the culture of the ear for pleasant sounding speech." Here, then, we have the primary cause of bad English: First, in causing an arrest of the mind action itself by chilling the mental tendrils (curiosity and questions) by an unsympathetic attitude toward its early cravings, by giving material which does not appeal to the interest; and second, by forcing upon the mind prematurely the slower forms of expression,—reading and writing.

The positive suggestions, as drawn from the facts of this study, looking toward the proper training, may be summed up as follows:

1. Place the child in a rich language environment, and *let it come in contact with nature.*

2. The parent or teacher should keep in a sympathetic relation with the child by answering its questions conscientiously, thus encouraging it in its longings to understand the environment in which it lives.

3. Since the child's mind has limited experience with the objective world, and lives largely in the realm of fancy, such selections of myth and folk-lore should be told to it as lie within its power of appreciation as to its rhythmic, imaginary, and dramatic qualities.

4. The child should be permitted and encouraged to relate its own stories and facts of its own experience in its own way. If there is a tendency to report facts differently than they appear from the adult point of view, it should be remembered that to the child these things appear larger and colored by its own

pre-perceptions. The natural method of correcting these imaginary differences is to send the child back to nature to verify its observations.

5. Since the auditory memory is especially strong, and there is an interest in new words, this is the period to begin to learn literary gems and the time to learn to speak a foreign tongue.

6. Due to the development of the vocal organs, this is the time for rote singing of the folk-songs.

7. Since this is the period of spontaneous play, the best method to pursue is, again, "to let the child alone in a rich language and natural environment, and set it a good example."

2. THE PRE-ADOLESCENT PERIOD.

The period from seven to eleven or twelve has generally been recognized as a period of re-adjustment, an intermediary stage of life between the stages of greatest physical growth and functional maturity. It is introduced by a period of physical disturbances, as teething, changes in the vascular system, etc., accompanied by a loss of vitality, after which growth is uniformly less rapid. The senses are alert; muscular and mental co-ordinations are advancing rapidly; verbal memory is at its best; and the imagination, having been tamed down by experience, is less wild and fanciful. As shown by the studies upon play, interests, and ideals, this is a transition period from the narrower personal to the broader social self, the plays pass from the individual to the organized group games; the ideal is extended from the personal acquaintance to some historical, literary, or national character.

The development of the language interest is equally characteristic. The childish interest in myths and fairy-tales is now passing to the stories of life, the narratives. Wissler (86), Miss Clara Vostrovsky (83), Barnes (2) and others have found that stories, involving the stories of daily life and animals in action, are much preferred during this period. "In the child's story," says Miss Vostrovsky, "no sentiment is expressed; nor are its own feelings referred to. There is little of the æsthetic, no description of person or dress, and not general but definite names are used by it. To the child, certain facts or conditions produce certain inevitable reactions, and to mention these reactions seems to it an utter waste of words." In the child's thought and composition, there is a straightforward narrative, which is packed full of vigor and of the "strenuous" in life.

During the period of childhood, as we have seen in the study of the rhyming instinct, the soul is often swayed by Nature's modes; but in the pre-adolescent stage, the soul appears to cadence more to the social rhythm. Miss Fannie Gates found

that children of seven generally preferred the lullabies and baby songs of home and school,—this interest continuing quite constant up to eleven. One boy of seven says, "I like *Jingle Bells* because it seems as if you could hear the bells jingling." Another says, "I choose *America* or *Star Spangled Banner* because it is our country's song." There is, however, a gradual increase in the interest in National songs, which appeals to another impulse. With the extension of the social consciousness, the historic and the patriotic feelings and emotions manifest themselves in larger impulses. A boy of thirteen says, "I like the *Marseillaise* best because it rouses me up, and the words express just what you feel." *America*, *The Battle Hymn of the Republic*, and others are chosen because they are "songs of freedom," "impressive," "fiery;" the tune is grand and corresponds with the words. The associational element also appears in consciousness during this period. One boy of eight says, "I like *Pretty Robin* because in summer when we open the window he sings." Girl of eight says, "I like *Jesus My Shepherd*, *Home Sweet Home*, *In the Green Woods*, because mamma used to sing them to me when I was small." A boy of eleven years says, "I like best *I'm a Shepherd of the Valley*, because it seems like the mountains where I used to live, and where the sheep used to be."

These illustrations, which are typical, tend to show that this transition period contains many elements of childhood as well as the beginnings of new elements which foreshadow the dawn of a new day of development.

(1) *Interest in the Choice of Words.*

The interest in words during this period is significant. As the studies of Miss Williams (85) and Mr. Conradi (18) show, there is a special delight in new words because of their form, they look "pretty" or "queer." Words in which reduplications of letters or syllables are prominent are preferred, *Mississippi*, *zig-zag*, *lullaby*, *murmuring*, *aurora-borealis*, being special favorites. The newness, strangeness, and bigness of words form another element of interest. *Constantinople*, *delightful*, *extraordinary*, *circumstantial*, *ecstasy*, are mentioned as being especially pleasing. One observer writes, "When about nine years old, proper names were quite interesting to me. I remember sitting down with my slate and writing all the proper names I could think of, and then getting my spelling-book and looking up all the proper names it contained. My dolls never kept one name for a very long time. I was always sure to find another which I thought prettier than the one in use, and so changed it at once for the new one."

This interest in which the reduplications of letters or syllables

are prominent was more or less consciously the predominant element in the earlier period; but there is another interest besides the interest in the words themselves, which comes to the fore-ground of consciousness now; that is, an interest in the associations which go with different words. These studies show that certain proper names are preferred and others rejected because individual bearers had brought credit or discredit upon them. One observer states, "I would not have a brother named Clarence lest the name should make him as disagreeable as certain boys of that name that I know." Another says, that she believed that if one were called by the name of a flower, as Violet, she would certainly possess the qualities of the flower, those qualities being carried by the name,—the name being a characteristic which helped to make the person.

History reveals the fact that Christian names as well as surnames still have their associated meaning: Thus, Anthony is priceless; Augustus, imperial; Clara, bright; Priscilla, old; Rufus, red or red hair; Sylvester lived in the country; Mary, the most popular of English girls' names, is of Hebrew origin and meant, according to some authorities, *bitterness*, according to others, *stubbornness*; but when the name became associated with the Virgin it became almost a synonym of purity and holiness. Youngé has shown the same development of the meaning of names in mythological literature among the Anglo-Saxon races. North American Indians and African tribes, we are told, largely obtain their names from the association with some personal peculiarities, complimentary or otherwise, or as a result of some deed of prowess. According to Miss Fletcher, they change the name from time to time with elaborate ceremonies, as the accomplishments of the individual change. Dr. Burk has shown that boys and girls enjoy naming others by some, usually uncomplimentary, epithet, and *Long-Legs*, *Bean-pole*, *Skinny*, *Reddy*, *Cry Baby*, *Scab*, and the like, are found in every company of play fellows.

(2) *Form as Seen in the Economy of Expression.*

Several facts stand out in clear relief in the development of the language interest of this period. First, the passing from a predominantly sensori-motor toward an associative type of mind. The child begins to see a larger meaning in the facts of sense experience. As Barnes (3) has shown, words grow richer in content. The child, on hearing a word, will by euphonic analogy jump at a conclusion as to the meaning. Thus, 36 out of 200 children in a western State defined *monk* as a little squirrel; one defined it as a *chipmonk*; others confused it with *monkey*; still others had a vague sense of its meaning; as, "a monk is an old man," "monk means cruel," "monk is a rank," "peo-

ple that used to live in Spain." The years from seven to eleven are years of rapid progress in the content of words. The same is shown in a study of Schoenrich's experiment (71). He dictated the words *Christopher Columbus* and *Chicago* to children 7, 8, 9, and 10 years of age. The results show that the child's word-forms are but a bare ghost of the original. Christ of Columbus, Krist of Colonembes, Kristofscollumbus, Chickorgo, Schickkoga, Schigo, Sechcoler, Chickkeargo, are some of the distorted remains of these two words.

Before this period, there is a delight in everything that makes a strong appeal to the senses. Motor activity is spontaneous and lacks co-ordination, so that the expression inadequately represents the copy. Second, during this period, as Dr. Hancock has shown (55), there is a rapid stride in the development of the speech form. The speech form of children is characterized by connected narrative; there are few articulations and subordinate statements. All verbs are essentially principal verbs connected by *ands*. There is no real sentence division; the stops are not determined by a sentence sense, but rather by pauses for breath. The use of simple sentences decreases about thirty per cent. from ten to fifteen years of age, with the greatest change from perhaps eleven to twelve and thirteen to fourteen, especially in boys; while there is a rapid increase in the use of the complex sentences from ten to eleven years. The percentages of subordinate sentences show,—first, the relative increase in number used; second, the relative proportion of each kind used at eleven and fourteen. The number of subordinate sentences (adverbial, adjective, and substantive) used increases rapidly from ten to eleven years for both boys and girls. The adverbial subordinate sentence is the kind most frequently used by children during this period. The child still makes many errors in form of expression, both oral and written. To quote from Professor Barnes's comments (2),—"One cannot help feeling as he reads this story (Robinson Crusoe) that the boy could not have both the eager desire to write, and what we ordinarily consider a proper respect for grammar, spelling, and punctuation. This boy has some rudimentary respect for form, as we see by the way in which he inserts periods and commas here and there, by the way in which he occasionally reverts to capitals; but his forms never get between him and his subject. They are like the clothes of South Sea Islanders,—reserved for Sunday service."

In the study of form and expression, we see again the operation of the principle of economy. But, it being the time of rapid motor co-ordination, its operation is apparent in the intensification of energy in thought expression. The many loose compound sentences with three or more predicates so charac-

teristic of childhood are combined by condensed or suppressed forms, thus changing the form from the child's mode of expression to the simple complex and compound sentences of a more mature mind. This process, says Mr. Hancock, may continue still farther, and what was at one stage historically a co-ordinate member of a compound sentence becomes at the next a subordinate sentence; at a later stage it appears as an infinitive, participle, or conjunctive clause; and later still it may be found a single word, or prepositional phrase, doing in this as much work as in its earlier form.

Third, there is a greater exactness of memory, and in the economy of expression there appears a greater precision, which manifests itself in the use of more exact and concise statements without flowery embellishments; precision and slang increase gradually between nine and eleven in both boys and girls.

(3) *Summary and Deductions.*

When we turn to the matter of training, this period is in many respects unique.

The child, in the sensori-motor stage, lives in a world of things; its mental images are clear or vague according to the vividness of the experience. The mother-tongue has been largely acquired as a matter of experience; the vocabulary will be large or small, the content of words rich or barren, according to the language heard and the facts experienced. Childhood essentially emphasizes the *sensory* function of language with the motor function in the background. If a foreign language is to be learned, psychological principles demand the object of sense before the auditory symbol. The mind must become conscious of a new experience and feel the need of an appropriate symbol by which the experience may be labeled and recalled before the word is given.

During later childhood or pre-adolescence, when the *motor* centres with their connecting associations develop more rapidly, when speech co-ordinations are becoming habitual, and words begin to have a larger associative meaning, the process of instruction should vary. The child should now be required in a measure to reverse the process; it should be required to gather up the particular facts of experience, organize these, and express them in oral speech. This will stimulate the associative processes and give control of the motor co-ordinations. "The child," says Dr. Hall, "should live in a school of sonorous speech. He should hear and talk for hours each day. He must have less reading, less writing." This will require the individual to gather up the associations of his experience and express them by the most direct circuit. Miss Williams (85, p. 294) has called attention to the paralyzing effect of the

fear of ridicule and unsympathetic criticism, in a period when hearing is often imperfect, due to an improper perception for the sound of the word; when associations are rapidly forming and the child mistakes the connection; when motor co-ordinations are still imperfect, mistakes are inevitable, and every suggestion intended for speech development should be to stimulate mind activity, which in turn will find the proper channel of expression. Many "so called" errors are simply characteristic of growth, which growth alone can eradicate.

SUMMARY.

I. Since this is the "Golden Age" of verbal memory and the period of rapid motor co-ordination, after the mother-tongue has been acquired, the training given should be as follows:

1. Systematic drill in the correct pronunciation and content of words.

2. If the child has not yet learned to read and write, this is the period of systematic instruction, and the mechanics of these arts should be almost reduced to reflex acts.

3. This is the period in which the child should learn a foreign language by the conversational method.

4. Correct form should be given in examples of literature rather than by didactic instruction in grammatical forms. The spirit must not be sacrificed to the letter.

II. Since this is the time when the child's ideal extends to broader fields of acquaintance, to historical, literary, or national characters, the training should be accordingly:

1. To make the child acquainted with the lives and deeds of the great characters of the race.

2. To saturate the child's mind with the masterpieces of the literature of the race, in order to keep his thoughts and feelings in *rapport* with the race.

3. To let the child live in sonorous speech, and let him talk much the thoughts of his best experience.

III. PERIOD OF ADOLESCENCE: OR THE SECONDARY PERIOD OF LANGUAGE DEVELOPMENT.

The passing of the Golden Gate of Childhood into the Storm and Stress Period of Life has been recognized in strange and significant ways by both primitive and civilized people. The feasts, ceremonies, and many mystic rites are monuments along the line of progress. The physical changes of this period, as is well known, are increased growth and functional maturity. The voice changes; in girls, it grows richer in tone; in boys, it falls an octave in tone and changes in its general quality. The psychological changes have been observed in an increased mental activity, as manifested by the keenness of senses, the

hopes, longings, passions, dreams, and temptations, by the fuller development of the rational powers, and the changes in the social and religious ideals.

(1) *Interest in Nature and Reading.*

The changes that occur in the language interest are as significant. The longing of the soul is now apparent, as shown by the studies of Lancaster (46), Chase (14), Williams (85), Conradi (18), and others, in a desire to get near to Nature in her various moods and forms. It is here that the adolescent soul finds a sympathetic response which brings rest and self-control. It is to Nature that the disturbed soul flies to find a refuge from its warring impulses. Nature invites and gives time and quietness for thoughts and meditation which the awakening soul demands in order to adjust itself to the new order of things. The curve which marks the love of nature, as found by Lancaster, rises rapidly from eleven to twelve, culminates at thirteen, fourteen, and fifteen years, and then gradually declines again.

The desire to extend the bounds of experience may again be observed when the soul takes flight in books, in what has been called the "reading craze." This passion, as the studies show, coincides exactly with the love of nature, increasing gradually from eleven to twelve, rapidly from twelve to fourteen, culminating at fifteen, and then gradually decreasing to twenty. Lancaster (46) has further collected facts from the biographies of two hundred eminent novelists, poets, inventors, and artists, and found that one hundred and twenty, or sixty per cent., experienced a period of the "reading craze."

F., 23. I was allowed to read just what I chose, and chose to read everything I could get at thirteen. For two years, it was a great passion.

F., 23. I read *Ivanhoe* many times at thirteen, so that I could repeat pages and pages of it. Passionately fond of Roe's novels at fourteen. Poems of Nature, especially Scott's *Melrose Abbey*, and Tennyson's *Saint Agnes' Eve*, and Longfellow's *Legend Beautiful*, were imprinted on my memory never to fade. Whereas poems studied and recited as tasks have all faded.

M., 32. At fourteen and fifteen I read the life of Napoleon. It made an immense impression on me. I tried to dress like Napoleon, copied dozens of pictures of him. At eleven and twelve I read novels, the more the better; read in bed, on the stairs, everywhere; neglected everything else.

F. At twelve to sixteen, read mostly boy's books. At twelve, I became perfectly wild over Duchess' and Laura Jean Libby's books. From eleven to fourteen I read everything—detective stories, dime novels, Sunday school books, standard authors, religious papers, newspapers, magazines. Sat up in bed till after midnight. At thirteen, I read nine novels in one week. From twelve to fourteen I read four books a week.

M., 18. As a child, I was delighted with fairy-tales and characters in action only. Became a great reader of fiction and poetry at the adolescent period.

Edison attempted to read through the Detroit Free Library, and read fifteen solid feet before he was stopped.

Alex. Murray, at fifteen, in one and one-half years, acquired almost unaided the Latin, Greek, French, and Hebrew languages, and read several authors in each.

Franklin, at thirteen, read poetry all night, and wrote verses and sold them on the streets of Boston.

Bryant had poor health till fourteen, when he changed permanently to good health. He was a devoted lover of nature, and began to write poetry at nine. From twelve to fifteen, he was deeply religious, and prayed for poetic genius. He wrote *Thanatopsis* in his eighteenth year.

Howells wrote an essay on human life at nine. He was on a newspaper from twelve to fourteen.

Holmes wrote poetry at fifteen.

Joseph Henry at ten followed a rabbit under the Public Library at Albany, and found a hole in the floor that admitted him to the shelves. He took down a book which interested him so much that he read all the fiction in the library.

T. B. Read had a passion for reading from twelve to thirteen. He ran away at seventeen, painted, acted, and wrote poetry.

Simultaneously with the increased interest in Nature and in books, the feeling toward God changes to a more sympathetic, deep seated, emotional sentiment. The interest in music and art changes from the more sensuous to that which admits of thought or emotional interpretation; the musical drama is preferred to the merely melodious or rhythmic; the work of art which portrays a drama of life to the gorgeous or highly colored. "I see the soul of the artist now in the picture." "My pulse quickens at the sight of a fine painting." "At thirteen I longed to be a sculptor." "A deep and discriminating love for pictures came at eighteen." "From eight to twelve, I liked pictures of birds, boys, and girls. Now I like pictures in which there is sentiment." "At fifteen, a picture of Angelo's *Madonna* suddenly struck me with a beauty that nothing else has ever made me feel." These manifestations all go to show that the adolescent soul is becoming serious and thoughtful, and, to satisfy its cravings, spontaneously turns to the two great storehouses of modern thought. The motives given for turning to Nature and books are at least suggestive to parents and teachers. Nature seemed real, gave a strange thrill of companionship. The trees, flowers, and birds seemed to understand the soul. Nature inspired pure thoughts and gave relief to the overwrought feelings. The reading of books gave pleasure, stirred the emotions, aroused the imagination. Others read because they loved to read, to gain knowledge, to increase the vocabulary. And still others because it was "the fashion" to be able to say that they had read many books.

The kind of literature preferred is shown by the statements of the readers themselves, and also from the replies of forty-nine librarians in answer to the following questions asked by Dr. Chase: (1) At what age would you say there is the greatest demand for books? (2) Do boys and girls differ in respect to age? (3) Do they differ in the intensity of the book craze? The answers generally agreed in that from ten to fourteen there is the greatest demand for books. Among the poorer classes, the boys and girls differ little in respect to age; but among wealthier children, the girls are two years in advance of the boys. The poorer girl wants fairy love, while her more advanced sister is more apt to be devouring emotional literature of the Elsie Densmore style. I am often asked for a sad story by my twelve-year-old girls. It is a matter of common observation that at this age boys begin to react against the pathetic or sentimental, and prefer the out-of-door stories of life and action, while girls still cling to the emotional and sentimental. Professor Bullock (8) found by inquiring into the literature read by fifteen hundred Colorado pupils between the ages of ten and eighteen, that the maximum amount of reading is done on the average in the seventh grade, at an average age of fourteen and one-tenth years, and that the girls reach their maximum a year earlier than do the boys. He also found that in boys the years from fourteen to sixteen are the years for love of adventure and war stories. Ninety-five per cent. of the boys preferred stories of adventure at sixteen, and eighty-six per cent. preferred war stories at fifteen; while eighty per cent. of the girls preferred stories of adventure, and fifty-five per cent., war stories at thirteen. Stories of great men were preferred next in order by seventy per cent. of the boys at sixteen, and love stories by seventy-five per cent. of the girls at eighteen and seven-tenths years.

F. Books that worked up the feelings, that were either sad or exciting.

F. From thirteen to sixteen, books which were emotional. Before that, books of travel and adventure.

M. History and animal stories, because they were in our library at home.

M. Adventure, travel, history.

M. I liked to read about explorers and inventors.

M. I hated sad stories that made me cry; I wanted something stirring.

F. Historic romances and pictures of court life. I liked the splendor of their descriptions. It was all so different from my own plain life.

F. Story books, novels, and Sunday school library books.

F. I don't know why, but when I was fourteen or fifteen I liked to read about funerals and people dying. The sadder it was the better I liked it.

M. Generally, when we chose, we boys liked thrilling and dare-devil stories. I liked biographies of war heroes.

M., 14. *Peck's Bad Boy, Diamond Black, Buffalo Bill, Jesse James, Wandering Bill.*

F., 12. *The Outlaw's Bride, Against Fate, The Beautiful Wretch, What Love Will Do, Mona's Choice, One Life, One Love.*

F. Most interesting books I have ever read are *East Lynne* and *Repented at Leisure*.

One of the chapters of the Language Interest which reveals how little the adolescent mind is really understood, and how little its needs are administered to by modern society, is that of clandestine reading. While the studies in this field have not gone very far, yet those of Professor Lancaster (46), Dr. Chase (14) and others go to show that surreptitious reading among young people is more frequent than is generally supposed by parents and teachers, and that its influence is unwholesome if not in some cases pernicious. Of the three hundred seventy-six cases reported by Dr. Chase, sixty-five per cent. of the men and forty-six per cent. of the women reported a period of clandestine reading. The motives for such reading are characteristic of the adolescent mind. The reading habit has already been formed. Sixty-four per cent. clandestinely sought information which was withheld from them by parents or teachers; twenty-three per cent read forbidden or condemned books; thirteen per cent. read in stolen time. The seriousness of this problem is apparent. Overwhelmed as the adolescent is with new impulses, feeling the restraint of the old life, he is given to solitude; if he does approach his elders with questions which to him are all important and meets with an unsympathetic response, or what is worse, a denial, his mind rebels and he seeks elsewhere.

F. Yes, read one book that way; it answered some questions I was anxious to investigate.

F. Read silly novels on the sly.

M. Read *Dick Turpin*, an act of rebellion against the narrow restraint put on my reading at home, my father being a Puritan in other matters.

F. I remember having read one book in that way. I think I read it because I knew my mother didn't want me to, and was curious to learn the reason.

M. Yes, to see if I had certain diseases that I imagined I had.

F. Yes, I did read books secretly. I read in regard to the propagation, if it may be so called, of the human race.

F. To obtain lawful information which might better have been given me by my mother.

F. A period of low-down story papers given me by my friend, Nellie, in the kitchen, which by times I tore up for their bad English, and wept in secret for their love scenes.

M. He (my brother) was at the age when he and his friends thought it 'smart' to invest in nickel novels of the *Nick Carter* and pirate sort, and read them in their shanty, constructed in an empty lot. Some of the novels found their way to the house, and my mother, with the same apparent interest as in other books, and without comment, read patiently at these till the boy—the charm of secret reading removed—

of his own accord became disgusted with the improbabilities of the stories and gave them up.

(2) *Forms of Expression.*

When we turn to the side of expression, the phenomena are characteristic. Adolescence is marked by periods of rapid expansion when new impulses break forth with such overwhelming power, and the content of the mind enriches with such rapidity as to leave behind the motor development; in consequence, the adolescent like the infant lacks muscular co-ordination and control and becomes awkward in his movements, often self-conscious in the extreme. Something akin to a self-conscious period may be observed in language. Before this period, language was a more or less spontaneous form of expression with the element of pleasure centered chiefly in the motor and auditory sides; but now, with the changes of mental attitude, voice, etc., the interest changes from a subjective, undifferentiated to a differentiated, conscious, and objective element of the self—an instrument of thought to be used, changed, re-adjusted to meet certain ends. The adolescent mind may at times be thronged with new experiences; new emotions may stir it; new views of life may appear; but for the expression of these impulses, the old language vocabulary may be entirely inadequate, and the youth may in spite of the supplication of Phoenix to Achilles "sit as dumb for want of words, idle for skill to move." There are periods when the youth seems tongue-tied; at times the insipient forms of expression end in vain imaginings; he sees himself the orator addressing learned bodies of people or the centre of a social circle; or perhaps winning fame by writing a poem or novel. There are other times when poems are committed and recited; when attic poetry is actually produced. There are still other times when the youth plunges with great vehemence into oratory and debate. That the adolescent does experience such a dumb-bound feeling is clearly shown by studies which have thus far been made.

THE DUMB-BOUND FEELING.

The studies of Miss Williams (85) and Mr. Conradi (18) go to show that the adolescent does become painfully conscious of the breach between the mind's content and its power of vocal expression. "The thoughts and feelings come too fast" for the channels of expression. This feeling of dumbness may be further augmented when the adolescent matches his own naïve expression in speaking with those of his "superiors" who use correct grammatical forms and literary style. To overcome this embarrassing predicament the individual "takes a spirt."

To fill up the "vocal gap" he seizes upon words, phrases, slang expressions, and appropriates these with eagerness and enthusiasm; foreign languages are easily acquired; the uninteresting spelling-book, dictionary, and lexicon are voluntarily studied in order to find suitable terms that shall express in an exact, concise, emphatic, yet in a "beautiful," informal, and natural, manner just what the soul experiences. The more explosive expressions appear in the forms of oaths, and even swearing itself is indulged in with impunity. To cultivate a "literary style" many individuals imitate the style of their instructors, conversationalists, and literary writers. During later adolescence, when the power of expression has developed, there is in many cases a positive reaction against imitation. Slang is considered vulgar; the adolescent thinks its influence upon English is bad, or, as others think, it leads to swearing, which is positively bad.

— 14-15. Could not find words to express my feelings. I had grand and airy thoughts, but could not express them.

M., 17. Very difficult to think and speak at the same time; came to feel dumb-bound.

M., 21. Hard to express myself when with those who are not in sympathy with me.

M., 19. I find it hard to use good grammar when with my superiors.

F., 28. From twelve to eighteen I was fluent and never failed for a word. Criticism at eighteen for use of language made me conscious and stumbling.

M. About twelve I had feelings too deep for me to express.

F., 17. The dumb-bound feeling expresses my condition exactly. This is especially true when I feel that a thing is so.

F., 20. I have found it harder to express myself; that is, I have far more thoughts, but cannot readily put them into words. The thoughts seem ready to burst forth, but the words will not come.

F., 23. If a little embarrassed at thirteen, I found it almost impossible to talk.

M., 18. Find it much harder to express my thoughts, especially if it is something I feel deeply.

F., 28. Seems harder for me to express myself in words than ever; for I hear others talk well, and in trying to choose my language, I find that the right words will not come at the right time. I do not want to use my baby language, and so find it hard to say what I want to. If I used my old language, I could say it easily.

It is reported of Webster that he could not rise to speak before the school at fourteen, that he was fond of nature and solitude; and that his oratory of the Boscawen days smacked of academic artificiality and floridity, that the style was strained and stilted, due perhaps to his growing thoughts which could not readily adapt themselves to simple words, but associated more naturally with larger expressions.

"Studied dictionary to find new words."

"Used large words to talk to myself."

"Two girls used sodium chlorate and H_2O at home."

"Studied dictionary, soon got tired. Had read life of Shakespeare and learned range of his vocabulary."

"Used to like to write words with the letters *m, n, a, e, o.*"

"Learned foreign words from spelling book and tried to use them."

Adolescence has its periods of primal secrecy, when the soul at times quiets down. It shrinks from human society, and longs to be alone with Nature and its own longings and reveries. Lancaster has shown that there are those who long for the solitudes of Nature as early as eight and nine years, but that it becomes a passion at thirteen and fourteen. This new life calls for a language which is at once apparent in the so called *Secret Languages of Children*.

Dr. Krauss (45), Dr. Chrisman (15), and Thomas Higginson have given illustrations of this form of language, and have shown that its use is well-nigh universal among civilized people. The languages are produced partly in the interest of the secrecy which the youth feels, in order that conversation may be carried on without disturbance or divulgence; and partly in response to the new ideas and impulses of the pre-adolescent and adolescent ages. Dr. Chrisman collected a large number of these languages in use among American children and found that the curve of secret languages begins as early as five or six, increases rapidly from nine to twelve, culminates at approximately the age of twelve or thirteen, and then declines again to seventeen or eighteen years. Col. Higginson reports the language of two girls of thirteen who had made their "dialect" in the most vivid sense a living language, in that new words were constantly being added. "Many of the words are expressions of certain subtle shades of feeling which are constantly called forth in new forms by new experiences. They have now more than two hundred words arranged in a manuscript dictionary."

Mr. G. Schlegel (45) observed the use of secret languages especially among school-going boys and girls in Hungary. Their purpose in using them was to communicate in a language not understood by the teachers. "On going to China," he says, "I was therefore not a little astonished, when arriving in the year 1858 in Amoy (China), to detect a similar secret language among the Chinese children constructed upon the same principles. It was called the *sa-la* language, and the dodge consisted in doubling or trebling the syllable, and changing the initial consonant into *s* or *l*. *E. g.*, *goá ká li kóng* (I to you say) became *goáloasoa kálasa lilisi kónglongsong*." Dr. Krauss' collection of over one hundred fifty specimens of secret languages in use among European children verifies what Dr. Chrisman found true of the large number in use among American children, that many of these languages have been

handed down from generation to generation, sometimes changing in part to suit the user's purpose. In other cases, individuals have deliberately arranged a system of characters for communication. The sacred dialects not infrequent among barbarous nations, and the arbitrary perversions of the conjuror, according to Max Müller, are analogous to the secret slang dialects of the schoolboy, the European representative of the barbarian. At Winchester, for example, a secret jargon has been handed down from generation to generation, into which every new-comer is duly initiated like a fresh member of the thieves' fraternity. The motives for using the language, as given, are for the purpose of secrecy, the mere love of using a language different from the ordinary, so that those outside of a circle or "clique" are debarred from understanding the proceedings of the selected few, or to send cipher messages in the form of written characters, taps, eye winks and the like. Still others use it in imitation of older children.

Dr. Chrisman found that the written or cipher languages were generally of local invention, and were not as the spoken handed down. He furthermore classified all the secret languages which he found roughly into six general classes,—the syllabic, alphabetic, sign, vocabulary, reversal, and a miscellaneous class. Some of these possess considerable logical order, and rest upon definite principles; others, as the alphabetic, are wholly arbitrary, and consist of detached words and phrases which are learned by those wishing to use the language.

"I wished to know it so that I might be able to talk with my cousins."

"We did not wish others to understand what we were saying."

"To conceal from a sister four years younger."

"For the purpose of writing communications during school hours."

"To occasionally mystify our elders by using strange words."

"In imitation of the older classes who were reciting in Latin and Greek."

Adolescence, however, has its periods of language eruptions when silence is impossible. In some cases, this may not pass beyond the incipient stages. The youth sees himself, in imagination, addressing a multitude or winning fame by his literary works, a form of expression which is perhaps more common during early adolescence, or the period of rapid growth. Others become eloquent in telling thrilling stories to a company of intimate friends. Others repair to the attic chamber to give expression to their thoughts in prose or verse. Mr. Conradi found among the two hundred and two returns that forty-three per cent. had experienced a definite period of spontaneous poetry writing; and Mr. Lancaster reports that fifty-eight of the one hundred and twenty famous persons whose biographies he studied had written poetry at an average age of fifteen.

Tolstoi says in his biography: "I would fancy myself some great man who had discovered new truths for the good of humanity, yet was too bashful to meet common people calmly. The virtuous thoughts which we had discussed had only pleased the mind, had not touched the feelings of the heart. The time came, however, when these thoughts returned to my mind with such fresh power of moral revelation that I took fright, thinking what an amount of time I had been wasting, and I resolved that very second to apply these thoughts to actual life." Keats experienced a great change in his life at fourteen. Mable says of him: "There comes a time in the life of a boy of such gifts when the obscure stirrings become more frequent and profound. The imagination no longer hints at its presence, but begins to sound its mysterious and thrilling note in the soul. There is no other moment so wonderful as this first hour of awakening, this dawn of the beauty and wonder and mystery of the world, on a nature that has been living only the glad unthinking life of the senses. It came to Keats in his fifteenth year. It came with that sudden hunger and thirst for knowledge which consumes the days with desire as with a fire, and fill the young heart with passionate longings to drain the cup of experience at a draught. He was at the morning hour when the whole world turns to gold. The boy had suddenly become a poet."

F. I used to mount a barrel in the barn and imagine myself some great speaker with thousands and thousands of the most cultured people listening to me.

M., 19. At sixteen I got an idea that I was to be a great novelist. In the garret I wrote great works. Some of them are titles like *The Black Hand*, and *The Lost Lover Reclaimed*. I pictured countless admirers.

F., 20. Contemplated a musical career, fifteen to sixteen. I imagined myself the greatest musician in the world. I could see the audiences fairly spellbound, hear the applause at the end, and see the handkerchiefs wave. Now it is all past.

F., 18. At thirteen I craved history and religious literature, then novels and plays. Had a craze for the opera. Used to write poetry at thirteen. Now literature pertaining to God and Nature appeals to me most.

F. At fourteen told stories of desperate characters.

F., 18. First liked fairy tales, then novels, then books of travel. Wanted to write stories, tried, and failed.

M., 22. I attempted to write poetic prose and unpoetic verse. Read Kinsley, Scott, Irving, Bronte, then Curtis, Dante, Schiller, and Shakspeare.

F., 19. At fifteen I had a time of writing poetry on love, due to falling in love with an older and superior girl.

There is, however, another factor which similarly influences the growth of language. With the growth of self-consciousness, the adolescent instinctively becomes conscious of his personal appearance, his dress and manners, and seeks to correct

any untidy habits; he also puts on ornaments and bodily adornments: in short there is a development of what Darwin calls a *sense of the beautiful*. This love of adornment is seen in language by an introduction of descriptive words, figures of speech which sound "pretty," epithets, rhetorical elegance, gems of thought from literature, etc. Mr. Conradi found among over two hundred cases, forty-two per cent. had experienced periods of extreme adjectivism, nounism, or adverbism, principally between the ages of twelve and seventeen. Figures of speech appeal especially to the later adolescent mind, and this seems natural when we recall with Channing the purpose of figurative speech, which is understood to be that of fancy, perhaps of display, that which animates and delights. The youthful mind loves these rich foliages and blossoms of language, and thinks less at the moment of the solid trunk of logic and the slowly forming fruit beneath.

When twelve, it seemed to me the more adjectives I used, the more expressive my speech would be.

When twelve, I placed all the adjectives before a noun I could.

Especially favorite expressions are recorded as follows: Perfectly delightful; glorious good time; a beautiful, magnificent, audacious piece of work; the dirtiest, meanest, outlandish thing; a handsome, good-looking, attractive young man; the sweetest, prettiest, and loveliest hat; an immense, great, big house; exquisitely beautiful; simply great; a great, big, beautiful doll given by my dear, sweet mother.

A boy in writing to his mother filled half the letter with foreign phrases.

Another person used to pretend to talk in foreign languages by using queer sounds and unheard-of words.

At seventeen: My room-mate and I often take certain lengths of time in which we try to be elegant.

At seventeen: Study unabridged dictionary to be elegant.

Aged ten: Memorized expressions that seemed elegant, modified them, and then used them.

The tendencies in the use of written language forms of the pre-adolescent period continue during this period with an increasing number of condensed and organized sentence structures. This is especially significant in considering the lines of the language interest, when we compare it with the development of the form of English literature. Dr. Sherman (73) has shown that the Ante-Elizabethan, and even the Elizabethan, prose sentences are crabbed and heavy, and it is often necessary to re-read before the probable meaning reveals itself, while ordinary modern prose is clear and almost as effective to the understanding as oral speech. On measuring the number of words per period (sentence), taking twenty-five, fifty, one hundred and then five hundred periods of each, Professor

Sherman found the average number of words per period of the following authors respectively: Fabyan, 63.02, with as many as 141 words in two sentences; Spenser, 49.82, with 152 words in two sentences; Hooker, 41.40; Macauley, 22.45; Channing, 25.73, with 108 words in seven sentences; and Emerson, 20.58, with 88 words in eight sentences. In the early prose writings there are many predications. Chaucer contains on an average of 5.24 predications in an average of 480 periods, with only four per cent. of the total number of sentences simple; Spenser, an average of 4.68 predications in 500 periods, with eleven per cent. simple sentences; Channing, 2.56 predications, with thirty-one per cent. simple sentences, each in 500 periods. And here, again, as in child language, the change is due, according to Professor Sherman, to the operation of the principle of economy and intensification of energy. When the modifying and modified clauses are presented in mass, all on the same basis, the mind of the listener must receive and interpret the declarations. This can only be done after inferring the principal and subordinate parts. Hearing, consequently, becomes more difficult, and interpretation, less accurate; language is more obscure. The child instinctively, as his thought power grows, passes from the loose, involved, obscure sentence, which is halting and stilted, to the new, which furnishes the mind a medium of expression consisting of leaps and bounds, touching only here and there upon the mountain peaks of thought for a clear vision. It leaves much to suggestion and intuition, which lies in valleys of the suppressed parts below. This requires a different type of mind, one which is able to take a wider view as to the meaning of things. This is the important change in language structure of adolescence, and when once acquired, gives a feeling of at-homeness in general conversation and literary thought.

(3) *Training and Conclusions.*

The highest types of the language interest are represented in a clear-cut conversational style, in literature, in literary prose, poetry, debate, and oratory, all of which have their regeneration in the dawn of adolescence. These have ever been the objective points of the instructors of youths, every age placing its own special emphasis.

That the Greeks understood the adolescent mind, and appealed to the self-assertive and combative instincts, is seen in the nature of the instruction which Plato provided. "The Platonic myths," says Dr. Hall (31), "are precisely suited to the adolescent stage of psychic development, when sentiment is three-fourths of life, and symbolism and parables are perhaps chief among the methods of reason." If we add to this the

discussion of the larger questions of life, so full of interest for the adolescent, and the dialectic method, we can understand why Socrates and the sophists were at once persons of interest and admiration for the ephebic youths.

The poems of Homer abound with proof of the estimation in which the powers of oratory were held by the Greeks, and of the attention with which it was honored as an object of instruction in the education of youth. This is seen when Phœnix supplicates Achilles to lay aside his wrath, recalling his father's committing care:

"I, whom thy royal father sent as orderer of thy force,
When to Atreides from his court he left thee for this course,
Yet young, and when in skill of arms thou didst not so abound,
Nor hadst the habit of discourse that makes men so renowned,
In all which I was set by him t' instruct thee as my son,
That thou mightst speak when speech was fit, and do when deeds
were done,
Not sit as dumb for want of words; idle, for skill to move."

Oratory was the Art of Arts among the ancients. Plato defined it "as the art of enchanting the soul, and he who would be an orator has to learn the differences of human souls—they are so many and of such a nature, and from them come the differences between man and man. . . . He who knows all this, and knows when he shall speak and when he should refrain, and when he should use pithy sayings, pathetic appeals, sensational effects, and all the other modes of speech which he has learned;—when, I say, he knows the time and seasons of all these things, then, and not till then, is he perfect master of his art."

The conditions under which oratory developed among the Greeks and Romans have been pointed out by Mr. L. Sears. Still other conditions besides a literary atmosphere were necessary to its freest development; for this form more than any other demands favorable surroundings. Poetry may flourish in days of adversity, as among the captive Hebrews by the waters of Babylon, or in the disordered England, when Milton wrote his great epic. Sad prose may be written within prison walls, like Sir Walter Raleigh's famous apostrophe to death; but eloquence has never been successfully cultivated in captivity or under despotisms. It is in free states and under popular governments alone that oratory can flourish. The art of persuasion is valuable only as the people can be appealed to on the subject of public affairs, and where their judgments can be enlightened for the enforcement of political measures, and their feelings aroused sufficiently to lead them into personal activity and sacrifice; and where eloquence and freedom go hand in hand, the most remarkable exhibitions of human ability occur. One of the duties of the Greek citizen was to conduct his own

affairs in court, stating his claim and arguing his case. The plausible and capable citizen secured his rights while his diffident and tongue-tied neighbor could get no redress. And it is possible to conceive, rising upon the shoulders of such a populace, a Demosthenes, of whom it is said: "He moves, warms, and captivates the heart." Every oration of his is a close chain of reasoning that represents the generous notion of a soul who disdains any thought that is not great. His discourse gradually increases in force by greater light and new reasons which are always illustrated by bold figures and lively images. One cannot but see that he has the good of the republic entirely at heart, and that nature itself speaks in all his transports, for his artful address is so masterly that it never appears. To Quintilian the ideal man was the *bonus orator* with all that that implied.

The Middle Ages placed its emphasis upon dialectics, and permitted it to degenerate into a low form of eristics. Alcuin and Pepin employed these exercises *ad acuendos pueros* (to sharpen the wits of the pupils); and they were used, according to Drane, by the English teachers as late as the fourteenth century. "What is writing?" asks Alcuin. "The keeper of history." "What is speaking?" "The interpreter of the soul." "What is the liberty of man?" "Innocence." Etc., etc. In the Mediæval Universities, instruction partook of two forms,—the lecture (*lectio, lectum, prælectio*) and the disputation. The purpose of the instructor in the former was to set forth and explain the text; the purpose of the disputation was to elucidate and firmly establish (*ponere et determinare, arguere et disputare*). The disputation stood at the middle point of academic life. It was for this that the lectures were prepared, and he was the ablest scholar who possessed the greatest amount of ready wit and acumen in debate. Upon the disputations depended faculty honors, and at Padua students were for a time required to dispute one hour daily from the opening of the academic year to Easter time. The Jesuit appealed to the impulse of competition and combat by emphasizing disputation and debate as the mode of instruction. The modern literary societies and debating clubs now found in connection with all of the colleges and many secondary schools in America give expression to the spontaneous oratorical and debating impulse of the adolescent. The history of these societies may be traced back to the spontaneous student gatherings of the Middle Ages which were held for social purposes and where there was considerable eating and drinking to stimulate the sluggish mind, after which there was some rather bitter, often personal, theological disputation. As rapture and enthusiasm are the parents of poetry, so freedom gives birth to eloquence. The literary,

debating, and oratorical societies are at the same time the spontaneous expression of, and the training school for these spontaneous forms of expression.

The formal language training for the adolescent to-day in many cases still places the emphasis upon the skeleton of language,—the definitions of grammar and rhetoric, the form of expression and criticism. Literature is too carefully analyzed, and every part properly classified. The composition which the student writes is, in many cases, not an expression of his burning thoughts upon a subject, or if it chance to be, he is required to hang it upon a gambrel outline while it is dressed according to the principles of grammar and logic. All these methods, at their very best, tend to focus the attention upon form rather than spirit, to make the youth over self-conscious of that which ought to be unconscious; consequently, as these studies clearly show, there is an interference with the natural processes of thought. There is a period when the youth appears to be mentally ready for grammatical analysis and logic, which is, however, after the language interest has well advanced in its development and the logical powers manifest themselves by an interest in analysis. The youth often becomes a stickler for grammatical form and logical subtleties. That is the favorable opportunity for language analysis and criticism.

That the results of modern methods are unsatisfactory to pupil, teacher, and parents, one need but read the criticisms. Psychology of adolescence and the experience of those races which have succeeded in developing a high standard of the language art emphasize the following points:

I. When the adolescent mind pushes out into nature and books, let the opportunities be at hand to feed the soul, thus preventing it from turning in upon itself and becoming too conscious of its own consuming hunger: 1. By permitting it to gain experience in a hand to hand contact with nature and real life; 2. By permitting it to take its natural flight in books on those subjects which appeal to it,—but in both, by sympathetic suggestion, direct it in the paths of the race experience and literature.

II. Since the proper form of expression can only develop in response to proper thinking, the emphasis must be placed upon a stimulation of the thought processes. The youth should be permitted to read and commit to memory much good literature of interest to him, but he should *hear* and *discuss* it more.

III. Youth is a period of rapid growth, consequently there is a period of normal imperfections and abnormalities, which growth alone can remedy. The instructor can only wait and set a good example.

IV. The spontaneous impulse to speak, write, recite, debate, and declaim should be seized upon and encouraged by successful practice, and directed by constructive criticism.

V. Since the interest in the logical processes develops later than the expression, and does not necessarily contribute to power of expression, grammar and logic should be studied only after the language has become well established.

VI. Since the soul is enriched by contemplating the larger problems of life, encourage the youth to engage his mind in silent meditation at such moments when it is at its best, even though language is inadequate for expression.

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TYPES OF ADOLESCENT AFFECTION.

By THEODATE L. SMITH.¹

Among the myriad problems which arise in connection with adolescent development there is no phenomenon which demands careful study more than that of the rise of feelings which, in their highest development, give to the life of man or woman a depth and meaning otherwise unattainable. Protean in form, imperious in its demands, full of possibilities for good or evil, this fundamental impulse is too often made a subject of jest or of unintelligent criticism. As a subject of scientific study in relation to its origin, development, normal manifestations and effects upon character, it has received little attention. There is an extensive literature on the pathological manifestations of sex, some of which claims to deal with the psychology of love and of women, but however valuable such literature may be to the alienist, it contains few pages in which a normal woman can trace even the faintest reflection of her own development. Among the psychologists who have given special attention to the emotions Ribot (24), Sergi (27) and Havelock Ellis have each contributed a chapter dealing with love. Joanny Roux (23) and Mantegazza (20) have made special studies, and the *American Journal of Psychology*, July, 1902, contains an article by Sanford Bell entitled "A Preliminary Study of the Emotion of Love between the Sexes."

In all these studies, the point of view is practically that of Ribot "that the sex instinct, the last in chronological order with man and the higher animals, gives rise to the emotion of love with its numerous individual varieties." It is not surprising that psychological studies based upon a theory which, in laying undue emphasis upon one factor, neglects those upon which all the higher phases of love depend, namely, the altruistic instincts, should fail to satisfactorily explain many of the phenomena of love. In the biological series, as in man, the beginnings of altruism are clearly traceable to the maternal

¹ Data for this study have been collected by Miss Lillie A. Williams, of the Trenton State Normal School; by Dr. Margaret K. Smith, of the New Paltz Normal School; Mr. W. S. Monroe, of the Westfield Normal School; and a large collection of material gathered and epitomized by Dr. G. Stanley Hall has been at the author's disposal. To these and many other friends who have furnished aid and encouragement, the author wishes to express sincere thanks.

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and gregarious instincts, and we find no trace of anything which can be called love of mates until the parental instinct has reached a high state of development. Maternal care and sacrifice for offspring are found much lower in the scale of life than any traces of paternal or conjugal protection. Female spiders have been observed to sacrifice their lives in defense of their eggs but they are known to sometimes devour their mates. While there are scattered instances of a prolonged association of males and females observable in insects and fishes, there is little evidence of anything that can be termed affection between mates below the warm blooded animals. Probably the highest development of this is found among birds, and it is to be noted that when, as in the case of the cuckoo, the maternal instinct has degenerated, there is also failure of any true mating or signs of affection between males and females. A study of primitive races and the evolution of marriage (22-29) shows that in man, as in animals, sex love is the latest form to develop and that maternal love exhibits the earliest forms of self-sacrifice.

Another element which has been too little recognized in the evolution of altruism, of which love is the highest expression, is the influence of the gregarious instinct which, in both man and animals, takes an altruistic form long before the appearance of anything in the relation of animals of different sexes shows even the faintest foreshadowing of an altruistic factor. It is highly developed in the ants, bees, and termites, among which there exists an elaborate system of division of labor. It is probable that there is here a mixture of the maternal instinct, since the care and feeding of the young devolves upon the workers, which are sexually undeveloped females. The important rôle of the gregarious instinct, as a factor in evolution, has been brought out by Kropotkin (16) in his "Mutual Aid." Sex attraction by itself is not love, nor is there contained in it the essential element from which the higher types of love can develop, though when combined with the altruistic elements derived from other instincts, it may become the basis of one of the strongest and purest emotions of which the human soul is capable. The strong attraction between the sexes which seems to appear normally at adolescence has been recognized from the earliest times by the systems of seclusion, varying from those of the orient to the conventual and boarding school systems of the occident. But even convent walls do not prevent girls from falling in love, as history has repeatedly illustrated. Nor is it repression which is needed but an intelligent comprehension of the needs of adolescence, which, based on psychological principles, shall furnish a mental, moral, and physical regimen which will tend to prevent precocious development and preserve unsullied manly and womanly ideals.

The material for the present study has been collected from many sources. Some was obtained in answer to a questionnaire issued by Dr. G. Stanley Hall in 1895, many facts and individual cases have been reported by teachers of wide experience, a few old school girl diaries kindly loaned to the writer have furnished unusual glimpses into adolescent feelings, and to the following questions 114 answers were received:

I. Will you give a list of people of both sexes whom you particularly like, designating them by letters or numbers. Tell why you first liked them and why you like them now, mentioning mental, moral and physical characteristics.

II. Give a list of people of both sexes whom you dislike. Tell why you disliked them first and why you continue to do so.

III. Give cases.

(a) Where you have at first liked a person and the feeling changed to dislike. Give reasons for your change of feeling.

(b) Give cases where you have at first disliked a person and the feeling has changed to liking. Reasons for change.

IV. How do you know

(a) When people like or love you?

(b) When they dislike you?

(c) How would you show your love for others?

V. Give your ideal of what you would like to be. Do any of your friends approach this ideal and if so in what respects? Has this ideal changed as you have grown older and if so in what respects? Give your ideal (a) For a man. (b) For a woman.

Personal observation covering a period of fifteen years in boarding schools and colleges has been supplemented by studies in biography and literature and many individual contributions. The results of observation and reminiscence have been compared and the two classes of data have served to check each other. The material has been classified according to the relative and absolute age of those forming attachments and whether of the same or opposite sex.

The first class of cases considered is that of attachments between boys and girls of approximately the same age where the girl is under thirteen—38 cases between the ages of four and ten, and 112 between the ages of ten and thirteen were examined. Of the 38 cases between the ages of four and ten, fifteen were between children of the same sex and twenty-three between those of opposite sex. They are characterized by the absence of self consciousness in manifesting the affection and no difference is observable in the character of affection. This

conclusion is not in agreement with that of Mr. Bell (5) who thinks that there is an element of sex attraction normally present even at this early age. But Mr. Bell's cases are all of affection between boys and girls, and no comparison of similar attachment between those of the same sex was made. A few typical cases are given to illustrate the similarity of the manifestations of affection in both classes of cases.

M., 5, M., 5. Two boys who never quarrel. One cannot play five minutes with any one else without quarrelling.

F., 6, F., 7. Always plays with a little girl of seven. Sits with her in school; is willing to share anything with her, and is unhappy when separated from her. Very jealous.

M., 6, M., 8. Two boys so fond of each other that if one has a chance to go somewhere, he will not go unless the other can go too. Are very affectionate.

F., 5. The first day that I went to school I was sent out to play with a little girl about my own age named Barbara. When we came back to the class room we were friends, and for five years I enjoyed one of the sweetest and least interrupted friendships of my life. We never quarrelled, never forgot each other. In term time I slept at Barbara's house or she slept at mine two or three times a week. When separated, we wrote letters constantly. There was never any rivalry between us. I thought Barbara a much better child than I. I was good with her but away from her for five minutes I would often get into a quarrel with other children and cry with rage. We were parted at ten years of age by the removal of her family to another city and have never met since, but the memory of her as a child is of the tenderest.

M., 7. Will do almost anything for his sister (9 years); follows her, holds her hand and begs to be kissed.

F., 8, F., 9. Y. was devoted to G. who returned her affection in a measure, but Y. was always the one who was willing to do and sacrifice most. Was very jealous if G. played much with the other children. G. finally became intimate with another little girl who was very pretty. Y. was quite heartbroken.

These two children have played together for two years, are frankly affectionate. Seldom quarrel and like to share their possessions.

M., 10, F., 4. M. was quite devoted to F., used to ride her on his bicycle, bring her flowers, of which she was very fond, and on more than one occasion gave up his play time with the boys to amuse her. Had lost a sister about her age of whom he was very fond.

F., 7. Was teased so much about a boy that she thought she ought to like him. He brought her flowers and fruit, carried her books, etc. Lasted six months.

F., 6. A boy of her own age was devoted to her, gave her his toys, etc. She was teased unmercifully and despised him until another girl wanted him, then pretended she liked him. Used to quarrel and make up; made him jealous by being nice to other boys. Thinks now it was more fun than anything else.

The last two cases have been given to show the effect of suggestion which is responsible for many of the so-called love affairs between children, which unquestionably are productive of a precocity of ideas, and later, of feeling. There are also, as Mr. Bell has shown, cases of precocious development in children, but the cases of normal genuine affection between

children, whether of the same or different families, of the same or different sexes, appear to be characterized by the same manifestations, including jealousy. That self consciousness, ideas of love making and marriage are extremely common among the children in our public schools is only too evident. The massing of different grades in one building probably has a great influence in this respect since the younger children imitate those of the upper grades. To what extent this affects the normal development of the younger children is a problem which is as yet unsolved. In the 112 cases between ten and twelve inclusive, for girls this environmental influence is very strongly in evidence and it is probable that, by this age, there is an effect upon the emotions as well as upon the ideas. Yet in many of these instances, the evidence is unmistakable that the love making is largely imitative and is not accompanied by the emotions which should normally underlie the demonstrations, but tends towards precocious development much more strongly than in younger children. It rarely occurs between children where affection is of long standing and based upon real acquaintance.

BOYS AND GIRLS. AGES OF GIRLS 10 TO 12 INCLUSIVE.

F., 10. A girl and her brother (10) used to come to the house. At first they were shy of each other but the sister took pains to have them get acquainted. One day the sister said Ted wanted her to be his sweetheart and when she consented, he kissed. They got along nicely for a while and then he would n't speak to her. He told another girl that she had said mean things about him. She was provoked that he believed it and they never made up.

10 F. Liked the tallest and manliest boy in the room 15 years old. He was liked by all the girls but did not care for them. She never spoke to him unless he spoke first, thinking he would like her better if she did that way and also much afraid that he would find out she liked him and "make out" that he liked her. Of different temperaments and dispositions. Her mind was distracted from her studies. He never showed any particular liking for her.

F., 10. A playmate 9 years. Fair and of the good kind while she was dark and full of pranks. Always made fun of him behind his back and his face which he took in good part. Partners in games, together recesses, walked home together, skated and coasted together. Wrote notes, *she* never wrote silly ones. At one time all the boys and girls paired off and one of the boys married them. Thinks that she was "a perfect little fool." Have been friends ever since.

11 F. With a little boy who lived near. He brought her wild strawberries and candy. Used to hunt for stars together. Was invited to a social at his house. Felt proud at being called his girl. He gave her a carnelian ring. The family moved away soon after.

F., 11. *It was the fashion* among the girls of her set to have beaux and this boy in some way came with the others and liked her. Used to write notes to her. She thought that when they grew up they would marry, and was very much hurt when he told her that he preferred a girl of his own kind (Catholic). Now (17) it seems like a great piece of nonsense and she has forgotten his name and how he looked.

M., 14, F., 12. I had chosen Jeanne for my sweetheart and my two friends were the only beings who knew my secret. To do as they did, although I considered it a little silly, I wrote her name in cipher on the cover of my copy books; in every way and many I sought to persuade myself of the ardor of my passion, but I am bound to admit that the whole thing was a little artificial, for the amusing coquetry which Jeanne and I had indulged in early in our acquaintance had developed into a true and great friendship, a hereditary friendship I may call it. (From *A Child's Romance*.)

The following cases show a distinctly precocious development.

12 F. Very fond of a boy of 11. Jealous of his attentions to others. All she thought of going to school for. Used to give her cards and sent her a valentine which she valued highly. Was teased but liked it. Very careful not to let her parents find out about it. Thinks now she was foolish but at the time her feelings were sincere.

M., 12, F., 14. F., an adopted child of French parentage and bad heredity. Made advances to a nice boy of 14 who was visiting the family and liked her companionship because she was pretty and lively. Wrote him a regular love letter which surprised but rather flattered him. Carried on a regular love affair for about a week. Then the boy went away which ended it.

F., 13. Had played with a boy of my own age for several years. He was a neighbor and we had good times together. When we entered the grammar school we naturally walked to and from school together and our names were soon coupled. I soon grew shy and self conscious and even began to think myself in love with him. We were both silly for a time. It ended in the spoiling of a wholesome, pleasant friendship.

A teacher in the sixth grade writes. "One year a regular epidemic of pairing off was started by a new pupil somewhat older than the other children. Nearly every couple was married by a mock ceremony in which participation was not always voluntary though it happened in one or two cases that this started an intimacy." Several other teachers have reported similar instances in which the influence of older pupils, either in the same grade or in higher grades in the same building, is distinctly traceable. While no very definite age line can be drawn between the different types of intimacy existing between boys and girls, since there is so great individual variation in development, the cases occurring between the ages of 13 to 16 inclusive have been grouped together as belonging to the early stage of adolescence for girls. With the dawn of adolescence distinctly new elements are observable, the imagination receives a new impulse, there is an intensification of altruistic and egoistic impulses, and idealism which has hitherto played little part in the affections becomes strongly accentuated. In fact, so strong is this tendency to idealism, in both early and later adolescence, that there are numerous cases in which the object of affection is almost or quite a total stranger or even a character in history or romance. One young man fell in love with a composite photograph of a college class of girls and T. B. Aldrich has

illustrated this tendency to idealism in his story of Marjorie Daw, in which the hero falls violently in love with a young lady who existed only in the imagination and letters of his friend. Though it is impossible to draw any fixed line of demarcation between the real and ideal in love, since the ideal enters to a greater or lesser degree into every case, instances at the two extremes are widely separated and the extreme types of idealism will be treated by themselves.

OPPOSITE SEXES OF APPROXIMATELY EQUAL AGE,
14 TO 16 INCLUSIVE.

For this class, the material furnished 231 cases described in detail, and collective observations were furnished by a number of teachers. The first point noted in regard to these was their transient character. Their devotion extends from a few weeks or months to several years and, in some instances, several affairs were carried on at once. Very few ended in marriage. Of one High School with an average of one hundred pupils it is reported that among the numerous intimacies covering a period of four years only two resulted in marriage and one of them ended in divorce. The extent to which the High School is a college preparatory school is probably a factor here, as few of these early love affairs survive any prolonged separation. They are highly emotional while they last but, as at this age, emotional development far outruns that of judgment, they are only accidentally based on qualities that ensure permanence. Finck (9) somewhat fantastically enumerates fourteen ingredients of love which he divides into two groups, the egoistic and the altruistic. Under the first he includes individual preference, monopolism, jealousy, coyness, hyperbole, mixed moods and pride; under the second, sympathy, affection, gallantry, self-sacrifice, purity, adoration, and admiration of personal beauty. It is doubtful whether all of these ingredients could be detected in any one case, yet in so far as the division serves to point out the prevalence of egoistic and altruistic elements it is suggestive. Judged by the standard of the relative proportion of egoistic and altruistic elements, there are two very distinct types of adolescent love with many gradations between, the one representing, perhaps, the purest and most ideal sentiment in human life, and the other, fortunately seldom a wholly unmixed type, presenting one of the perplexing educational problems. A large part of the material collected from High Schools inclines toward this latter type. This may be due, in part, to the fact that cases of the first type are not open to casual observation and are far less likely to be reported in detail by those giving reminiscences. The reasons for attraction where given were carefully noted and in order of frequency:

those given by girls were, dress and manners, good looks, social position, personal attentions, muscular strength and in four cases, similarity of tastes. Very few of the boys gave reasons for the attraction but those who did mentioned chiefly personal beauty and attractive manners. A soft, pleasant voice was mentioned in a few instances. The good and bad effects of these intimacies were noted for each case and the results summarized. The good effects were, for girls, incitement to better school work, particularly if both were in the same class, effort to be more ladylike and pleasing, and greater interest in out of door life, for boys, improvement in manners, in school work, and in personal neatness. The bad effects, which occurred in 83 % of the cases, including some in which good effects were also present, were neglect of lessons, of other friends, jealousy, deceit, willfulness, unwholesome excitement and precocious ideas. In cases where personal familiarity was allowed, loss of mutual respect and a lowering of ideals was a consequence realized in retrospect. These effects are more noticeable in girls than in boys, and it is undoubtedly true that girls acquire a taste for this sort of excitement which interferes seriously with their normal development. Very few of the attachments formed during these years are based on any real knowledge of character or similarity of tastes and their transitory character is apt to create a craving for further excitement of the same sort. In cases where personal liberties have been allowed, kissing, love letters, etc., the mature reaction is usually one of disgust and regret. Disapproval and prohibition lead in many cases to deceit and untruthfulness. Though environment has an influence, and many of the most undesirable manifestations of these intimacies are due to it, there is nevertheless a fundamental law of life to be reckoned with here and after the dawn of adolescence there is normally an attraction between boys and girls. Sometimes there is repulsion or both factors may exist at the same time in the same individual. Among primitive tribes, this is the age of marriage, but the complicated conditions of modern civilization have so far separated the age of marriage from the years of early adolescence, that the feelings of responsibility and anticipations of founding a home which tend to develop the altruistic factors in love are lacking. Another factor whose importance is too little realized is the influence of what boys and girls read. "The Duchess," Rhoda Broughton and Mrs. Southworth are favorite authors at this age, and it is, perhaps, not to be wondered at, that a girl who from kindergarten days has heard talk of sweethearts, at that age considered "so cunning," and whose ideals have been derived from the above mentioned authors, should, by the time she has reached High School Age, have somewhat precocious

ideas as to the relations with her boy acquaintances, and that these relations should prove to many girls a distinct source of intellectual and moral detriment—Miss Eastman's Study, *The Evolution of Dodd's Sister*, a book which it would be well for teachers and parents to read thoughtfully (8), has pictured with great clearness the deteriorating effects of some of the influences which are unfortunately prevalent in our public schools. There are undoubtedly genuine love matches which have begun in childish or early adolescent friendships, and of which the later love is the flower of the childish affection, but in the few instances in which these have been reported, there has been no courting during the boy and girl period and the dawn of romantic love has been a distinctly marked epoch in the lives of both. These cases belong to the altruistic as opposed to the egoistic type of which the following are typical cases gathered chiefly from our public schools.

F., 13. Liked a schoolmate. Paid her some attention and was nice to her but liked another girl better. Towards the close of the term they became rivals in class and he said some unkind things which were repeated to her. Two or three years later the attachment was revived and he liked her best. Never affected her studies; felt happier when he went with her but did not feel angry or jealous when he went with other girls. Her opposite in temperament and disposition. Thinks it was silly but harmless.

15 F. Fond of a boy of 18. Liked the attention. He used to carry her books for her and go to picnics with her. Her mother objected and she stopped answering his letters. Did not care very much.

F., 14. Attached to a boy of her own age. Used to go to school early to talk together. Skated together, went rowing. Went to parties and singing school, sleighing and coasting. Did not affect her lessons, smiled at him in school. Specially attracted by his gentlemanliness. Thinks it was only friendship on both sides. During the latter part of the time another boy tried to "cut out" the first one and they became very jealous of each. She became disgusted and dropped them both.

F., 14. Girl thought she was in love with a boy. Blushed when he came round or when his name was mentioned. Would wait for each other. Were perfectly happy when together. When they parted seemed disappointed. Have kept it up for five years.

M., 14. On the first day of school saw a new girl who had a wholesome sensible face. Instantly said to himself "If I am ever married it will be to that girl." He was.

F., 16. Carried on three affairs at once. No. 1 dated back to her third year when she lived in the house with a boy of 6. For two years they were "like twins" then she moved away. But the boy remembered her and wrote to her when she was 16. For two years they wrote to each other once a day—love letters. She tried to exert a religious influence. Finally told her that he loved her and was coming to see her. She was scared and stopped writing. After some months began again, was more cautious, heart would beat at sight of his letters. Another lapse and renewal. He went to see her and her love died. Says that his apparently continues.

During this correspondence No. 2 walked to and from school with her, spent afternoons with her, made her blush every time he looked

at her, etc. After she left No. 2, took long walks with No. 3. Thinks No. 3 was really *the one*. No. 3 was Irish-American six years older than herself, and her opposite in many ways. Never had much power over him. He was quiet and dignified but uncultured. She resorted to various schemes to see him but never invited him to the house with others. Used to go without lunch or supper to meet him. For two years received him Sunday evenings when her parents were absent. Rejoiced in the fact that she was the only girl he liked while lots of girls liked him. She desired his praise because he would not flatter.

F., 14. Fell in love with the boy next door who had lived there six years before. Did not attend the same school but studied together. She taught him to play tennis, swing Indian clubs, to play the piano, to lace his shoes in a particular way, and to recite her favorite poems "Paul Revere's Ride" and "The Charge of the Light Brigade." He taught her to skate, swim, ride horseback, ride a bicycle, collect, press, and name flowers, to fish by torchlight, to make Jack Lanterns and classify birds' eggs.

One reason she liked him was because she could boss him. Both were lazy, loved fun and noise and were particular about toys, books, personal appearance and manners. She read omnivorously and he did not like to read. He liked anything to eat and her list of foods was very limited. She loved to dance, he did not. He was jealous and she liked to provoke it.

15 F. Fell in love with a handsome young Scotchman, 19, blue eyes and auburn hair. The second day she went to walk with him and if he did propose intended "to cling to him, weep tears of joy, and accept him." Ignored all young men but made great efforts to be nice to the girls. They rowed, talked and drove together were much alike but he was an infidel. She could not study, her thoughts were full of him and what she should say when he proposed. At the end of two weeks he departed without asking her to correspond with him. Thinks if he had known her feeling that he would have ignored her.

F., 15. Went to the same school. Had to be carried on on the sly.

M., 17. Would look at each other in school and blush if caught. Either one would blush if the other was talked about. Liked to play in games together and be together at recesses. They did not get their lessons as well. They have had several quarrels and now their friendship is not as great.

F., 15. Attached to a boy of the same age. Talked of him continually, lessons suffered. When she could talk to him would hardly speak to any one else. Much alike in tastes, etc. Does not like to hear about it now.

16 F. Had always cared more for her lessons than for boys. One winter she formed the habit of going to parties with girls older than herself and was allowed to go with a gentleman. Her interest in her studies was much weakened. Sometimes she would stay out of a school the day after a party and even if she went would be half an hour late.

16 F. Was attracted to a young man who came from the city and who lived opposite. He was 19, very dark, jolly, well-educated and a fine conversationalist. The last attracted her most and she tried to study hard to be able to talk as well as he. She tried to be in the yard when he went to his business and to be ready for church at the same time. He sent her books, bon-bons and flowers. She thought at the time that he liked her but thinks now that he was amused.

16 F., 17 M. Like in temperament, unlike in disposition. His tastes were less refined. His muscular strength had a great charm. It did not affect her lessons or her liking for other people. He made

efforts to be with her and showed his affection by acts and words. She had no rivals and was not jealous.

16 F. Her sister was now left out. He was one of the go ahead kind while she was slow and easy. For two years they "sort of fooled along" quarrelling often and making up. Then they began to get in earnest. They would sit up till 11 or 12 two nights in the week or they would take long walks together. She would be very tired but it was of no use to say anything to her she would do what he wanted her to do.

F., 16½. When she entered the high school was attracted by a good looking boy. Did not meet him for nearly a year. Then their lessons were neglected for they spent their time writing notes. Was jealous if he smiled at another girl. Lost her liking when he began to grow homely. Thinks now it was silly but would not want to have it left out of her life.

16 F. Had always liked the boy and when she was teased about him began to think she loved him. Everybody seemed to know that she liked him. Does not know if he cared for her but he was always offended when she was with any one else.

In the class of attachments where there is disparity in age, there is a much greater element of idealism and they usually tend more toward the altruistic type. The good or bad effects in such cases are largely dependent upon the character of the older man or woman. The idealism lies almost wholly with the younger and the influence with the elder. Numerous cases are reported of girls falling in love, or imagining themselves in love, with their male teachers, and a boy often experiences his first touch of romantic devotion in chivalrous admiration for his teacher or some young lady with whom perchance his actual acquaintance may be slight. Frequently the devotion is quite unknown to its object and the feelings find outlet in a diary, letters which are written but never sent, poetic effusions, the writing of the loved one's name and occasionally anonymous gifts of flowers. Sometimes these attachments ripen into deeper feeling but many of them seem to be a mere outlet for the effervescence of adolescent emotion, and though in the hands of an unscrupulous man or woman such attachments might be productive of great evil, they are oftenest either quite harmless or a positive power for good.

M., 14. "André was ardently in love with a young lady almost six years older than himself who had already been introduced into society. I believe that his affair was a case of real and deep affection."

M., 14. "As for Paul—alas! His heart affair was very shocking to me, for it did particular violence to the ideas which I then had. He was in love with a little shop girl who worked in a perfumery store, and on his Sunday holidays he gazed at her through the show case window. He also wrote verses dedicated to her." PIERRE LOTI.

F., 16. Was persuaded by a man of 24 that she had become his "inspiration," and that her work in life was to comfort and uplift him. He was affectionate and good-natured, showed some signs of jealousy, but she was so shocked that he learned to repress it. Gentle home influence was brought to bear and she finally saw the truth and dismissed him.

13 F. A young man 9 years older came to board in the family. Thought him very homely and bashful. Her uncle liked him. These two men, a young lady of 18 and herself often went boating, played games, etc. The young man paid her more attention than he did the older girl. They were of the same tastes, but of different dispositions. He took her to places of entertainment and joined her when alone. The other girl tried a number of schemes to get him and finally succeeded.

14 F. Became much attached to her new tutor who was 20. He was poor but educated and refined; never lost his patience with her. She became very anxious to please him and, after a time, allowed him to select all her books. She was obliged to obey him while she usually had her own way with the boys she knew. Thinks he knew that she cared for him, and that he cared for her. Thinks it was not foolish but a very helpful attachment, and that she acquired habits of reading and of industry and learned to overcome her passions. She would not have allowed any one else to speak to her about these things, and she is still helped by his letters. Thinks it was foolish for her to imagine that she loved him in any other way than as a friend.

15 M. Went away to school. Was attracted by a girl of 17, of the same temperament, disposition and tastes. She was more cultured, and was an excellent musician. She had a beautiful form and was good looking. Began his attentions by asking if he might see her home from prayer meeting. After that often walked home with her. The boys teased him "quite some," but he liked it. All the time felt a kind of longing to be in her presence. It had no bad effect for she was very bright and he studied very hard to make a good showing. Improved his conduct for he feared her disapproval. He knew that unless he was careful, his relatives would disapprove. He won their approval by his prudence. He thinks of it now as an idle fancy or a sweet dream.

15½ F. Took a fancy to a young doctor about 25 who came to the town. Unlike in temperament and disposition, but both were very fond of books and compared favorite authors and passages. Never mentioned her liking, but thinks he liked her as well as she liked him.

F., 15-18. At 15 spent two months cruising in a lighthouse tender on the Great Lakes. Was attracted to by the second mate. Thought she "should like to know him, to befriend him, and to be a guiding, helping, elevating influence to him." In two months never got beyond remarks about the weather, and good mornings. She was too shy to step across the social gulf. Blushed at being helped into a boat by him. Felt her heart beat at the sound of his voice or his footstep.

The second summer desired him to love her. Spent hours thinking of him. Interfered with her sleep but not with her appetite. These summer trips were idle hours. The rest of the year was spent in study, and she thought little of him till after the third summer.

The third summer, was 17, growing pretty and felt herself more mistress of the situation. The young man sought her whenever circumstances permitted. No talk of love but an atmosphere of sentiment. Did not see him after that summer but corresponded with him for two years. Carried his letters, slept with them under her pillow, and was thrilled by them, though by no means love letters.

The young man was 25 or 26, tall, well built, wavy blonde hair and moustache. Without culture or much education, but manly and honest, and pure minded. Never took the slightest advantage of her evident liking for him. Parents knew nothing of it.

M., 19, F., 30. She was his ideal of beautiful womanhood. She gave him her picture, and he afterwards said of it, that he did n't dare

to even think anything that he should n't with that picture in the room. The influence was one of the best in his life.

LOVE OF AN IDEAL.

Some years ago a certain college professor offered as a tentative definition of love, "general benevolence concentrated on the individual," and to certain phases of adolescent emotion the phrase seems applicable. The emotion seems to exist in a diffused state and, to attach itself to some real or imaginary individual whom the alembic of youthful fancy transforms into its highest ideal. Marie Bashkirtseff (2), at the age of twelve, was passionately in love with an English duke, to whom she had never spoken, and saw only on occasional walks. He was quite unconscious of her existence, and had she really known him he probably would have had little attraction for her though he served as an objective point on which to concentrate her emotion. She thus writes of him in her diary: "I must write his name for if I neither mentioned it to any one nor even wrote it down here, I could no longer live. It is some consolation to write it," and in all her early dreams of greatness, it was the homage of this unknown man which was the most intense element.

On hearing of his impending marriage she is overwhelmed with grief and jealousy, but a year later she sagely writes: "Nothing in the world is lost. If we cease to love one individual, this affection is immediately transferred to another even without our being conscious of it. If one does not love a man, one loves a dog or a piece of furniture, and with the same ardor only in a different fashion." Marie Bashkirtseff was, as in this case, often wise beyond her years, and as a precocious product of social conditions denied all wholesome childish surroundings; a woman in experience while a child in years, she furnishes a psychological study of adolescence the more valuable because by its very exaggerations it throws a more vivid light upon normal development. The legend of the Flying Dutchman and the ideal love of Senta is a poetic rendering of the impulse to love and sacrifice which the dawn of womanhood brings to normally developing girls. Dante's love for Beatrice and Petrarch's for Laura are the classic types of love almost wholly ideal and yet which served as the inspiration of life work in both cases. Dante's actual acquaintance with Beatrice Portinari was very slight, and he was only twenty-five when she died, but his love's memorial was the *Divine Comedy* which he finished when he was fifty-six. The love of knights for their ladies in the days of chivalry was chiefly of this type, and each knight carried with him his lady's favor as an inspiration to deeds of knightly prowess. A pathetic instance of this impulse to love

something is described by Barrie in "Sentimental Tommy," where the lonely Grizel, cut off by circumstances from human affections, falls in love with her own image in the glass, imagines it as fond of her and sorry to see her unhappy. In Mr. Lancaster's (17) returns, out of 69 cases, all under the age of twenty-five, nine (2 m. 7 f.) loved purely imaginary characters and in many other cases there was a large element of idealization. In the writer's own returns a number of instances of this sort were reported though not specially requested. The tendency to hero worship so common in adolescence is closely akin to this.

M., 15. Fell in love with a picture of a girl whom he had never seen but whom a friend of his knew and described to him. Used to day-dream about her and refrain from doing things that she would not like. Some years later he met her but they never became well acquainted.

M., 14. Pierre Loti (19), at fourteen, fell in love with a beautiful girl whom he saw in a dream and in his later years writes of the experience. "It took me a very long time to forget her; I loved her, loved her tenderly, and the thought of her always stirred into life an emotion that was sweet but sad; and during those moments everything unconnected with her seemed colorless and worthless."

¹F., 19. "My first love was an ideal person. Did not last long."

¹F., 37. "My first love was an ideal character and much older than myself."

¹M., 21. Idealized a girl, love only lasted a few weeks; 2d case, idealized love, lasted two or three weeks; 3d, a teacher much older, idealized, lasted several years.

F., 40. At the age of fifteen was intensely in love with a teacher of twenty-four. "She was in reality a charming woman but I knew her very slightly outside the class-room. I was really in love with an ideal but it was genuine love and my heart always beat faster at the sight of Miss A. I never became really acquainted with her though her influence was lasting. Her standards were high and I wanted to do what would win her approval. She herself knew nothing of my feeling for her."

F., 38. "When about fifteen I was very much in love with one of the male characters in one of 'Sophie May's' books. The book was illustrated and I did an unconscionable amount of dreaming over the picture of this character. As I remember this must have lasted more than a year. It was, in fact, a form of continued story and the effect on the whole was good because even in small matters I used to try to measure up to what I imagined his standards would be."

Save for a possible tendency to overmuch day-dreaming these ideal love affairs appear not only harmless but in many cases a positive moral benefit and they certainly afford a safe outlet for emotions which might find expression in less desirable ways.

But these emotional outpourings are by no means confined to the attachments formed between those of opposite sex. Both boys and girls fall in love with those of their own sex, and we find these exclusive attachments existing between those of

¹ Mr. Lancaster's cases.

approximately the same and those of disparate age, as in the types already described. They tend toward the egoistic or altruistic type according to the characters of the individuals, the object of affection is often highly idealized, they present the same emotional characteristics and evoke very similar demonstrations. Any one who is familiar with boarding schools and colleges or any institution where girls and young women are grouped together, is familiar with these affairs and knows that when carried to excess they have objectionable features and tend to a selfish exclusiveness and emotional excitement which if continued is certainly unwholesome and harmful. There is frequently an excess of demonstration, silliness, disregard of other interests, and in some cases neglect of studies and other duties. In girls of delicate physique the emotional excitement may become injurious, as in any other love affair, especially if the course of love does not run smoothly, but these cases are a small percentage of the entire number. This type of love has never received serious recognition and treatment. In his "Psychology and Pedagogy of Adolescence" Mr. Lancaster (17) devotes a brief paragraph to it and says "The love of the same sex is not generally known but is very common. Without solicitation 49 cases have been reported. It is not mere friendship. The love is strong, real and passionate. Many of the answers to the syllabus were so beautiful that if they could be printed in full no comment would be necessary." Save this brief paragraph of Mr. Lancaster's, the only references to this type of love known to the writer are allusions to it as a pathological manifestation. Such an assumption can be based only on the theoretical ground that it fails to agree with the theory that all love is an evolution of the sex instinct, as it fails to present any signs of abnormality save those which are incident love affairs in general. Its frequency has never been statistically investigated but out of 91 answers which Mr. Lancaster received in answer to his request for cases of first love, 49 cases were love between those of the same sex. Over four hundred cases have been collected by the writer but have no statistical value in this regard as this type was especially requested. It would be interesting to obtain actual statistics of the number of college graduates who have completed a four years' course without being the subject or object of a feminine love affair. Some are neither very deep nor lasting, as happens with other love affairs, and doubtless imitation plays some part as it is often rather the fashion for freshmen to select some senior as the object of her adoration, to whom she sends flowers or shows her devotion in whatever ways may be permitted. Mr. Lancaster quotes a case in which thirty girls were in love with one particularly brilliant and attractive senior. Cases of this kind are almost purely idealistic,

as there is seldom much actual intimacy between seniors and freshmen, but the emotion is genuine and intense while it lasts. When there is actual acquaintance and intimacy the case is somewhat different, and more particularly in the case of younger girls the manifestations of affection are more open to criticism. Excessive demonstration and monopolism are characteristic features. When the intimacies are founded on qualities which insure mutual sympathy and respect, these features are generally temporary, and if the attraction is based on superficial or imaginary qualities, it soon dies a natural death. Many of these intense intimacies settle down into life long friendships and at their worst probably furnish an outlet for the stress and strain of adolescent ferment and prevent premature love affairs with the opposite sex. Their worst feature is usually the monopolism which, unless of brief duration, is apt to deprive a girl of the broader associations which are one of the benefits of school and college life. The question is of course pertinent whether these attachments interfere with the normal development of love which ends in marriage. The writer has never known of a case among women though occasional complications and jealousy are not unknown. Two have been reported among men. One of these occurred in the case of twin brothers where an engagement was broken on the very eve of marriage because the groom elect decided that he could not leave his brother. At the age of sixty these two men were still living happily together. In the other case the jealousy of the woman caused a broken engagement. It is probable that the maternal instinct which, though often unconscious, is very strong in young girls, and the influence of environment and tradition would tend to prevent any interference in the case of girls.¹

F., 8, F., 9. 8 met 9 when she first went South. 9 was a bright and entertaining girl. 8 took a fancy to her instantly and begged her to come to see her and stay all the time. 8 would run away to see 9 and sometimes stay half a day. All secrets shared, made all plans together. When 8 came North the parting was pitiful. When separated were very lively and wrote often. As they grew older letters grew less frequent.

F., 12, F., 10. Do not care for opposite sex. Always went together. One always called for the other and took her home. Thinks weak-minded girls give and strong-minded girls receive. Thinks this is very desirable in a teacher.

F., 10, F., 10. Sat together in school, studied together. Told each

¹The strength of this instinct is strongly manifested among the blind. Dr. Anagnos, of the Perkins Institution, states that because of the strong sympathy between the blind, it is necessary to separate the boys and girls at an early age and to instruct them as to the hereditary dangers of marriages between two blind persons. He states that the girls are far more responsive than the boys, and gives some instances of heroic self sacrifice of personal happiness.

other their private opinions of various matters. One was not supposed to tell anybody the things the other told her.

F., 12. Two girls who lived near each other were firm friends from the time they were four years old. Often quarreled but became friends almost immediately. Threats of whipping would not keep them apart.

F., 12. One very light with a sweet, loving disposition, the other dark and quick-tempered. If they had a quarrel, fought it out and were twice as good friends as before. Usually got along beautifully. Went to school together, sat together and were together in everything. Always stayed together from Friday night till Monday morning.

F., 12. When the girl first liked her, she used to run away. The girl persisted and kept telling her how much she loved her. They are very intimate now. But this girl does not care as much as the girl who sought her.

F., 13, F., 14. Are devoted to each other; share everything; always want to be dressed as near alike as possible. When the family went to the seashore, 13 begged to be allowed to stay at home and visit B. instead.

F., 14. Two girls of quiet, earnest disposition and great desire for a confidential friend. A. kept a diary which she one day showed to B. In this she told of her love for one of her teachers. This passion was the chief topic of conversation between them. They became very intimate but A. never opened her whole heart to B. B. was very jealous of this love affair. She told everything to A. and neglected all her other friends. She bitterly regretted it when one of them died. The intimacy was regarded unfavorably by the other girls in the set. A. was not demonstrative as to kisses, etc. B. would have liked to be but feared to displease A. They always sat very close together with their arms round each other. Sometimes spent the night together when they would talk for hours. Lasted for $3\frac{1}{2}$ years when it was dissolved almost by mutual consent. A. wrote to B. and said that she had discovered her affection was all a sham and thought their intimacy had better cease and that they hold the same relations to each other that they did to the other girls. And they did.

Normal School. Constantly together, call each other dear. When one is away over Sunday the other rushes to meet her on Monday morning screaming with joy. One is quiet and one is very excitable.

F., 14, F., 15. Fifteen was rather sophisticated, had spent most of her life in hotels and boarding-schools. Strong physically and somewhat of a leader. Fourteen was a little country girl sent to same school. A regular love affair, accompanied by excessive demonstration, developed. The younger girl was not strong and inclined to be jealous. Her health suffered and the matter became serious. There was some interference which had little effect except to cause hysterical fits of crying. After some months of love-making the two girls settled into an intimate friendship which did not exclude companionship with other girls and has proved lasting.

17, 19. 17 is very passionate and impulsive; while 19 is quiet and sarcastic though she has an affectionate disposition. 17 gives, 19 receives. 19 has the most desirable qualities for a teacher though perhaps a little too sarcastic. 17 gave flowers, visited 19 in her room, told her how much she loved her and reproached her for not returning her affection. Sometimes 19 would get tired and do things purposely to provoke her. 17 would be angry but would forgive her. 19 felt that she could do anything, and yet she was really fond of 17. 17 felt jealous and uncertain. Thinks this love was injurious for they shut out others who would have been of more benefit to them.

17, 19. Go about with their arms about each other. One always goes to the other's room at 9 o'clock.

17. Fell in love with a girl, not at all her style, but she had cute little ways. She returned it to some extent, then lost her interest. They are intimate now.

17. Much in love, called each other "dear" and "sweetheart." Went round with their arms about each other's necks. Wrote loving notes and showed their letters to each other.

F., 16, 17. Not alike; tastes differ in people, dress, music, school, etc. Go to places together when possible. If one stays at home the other stays with her. Have been intimate for four years and have never had any hard feelings for each other.

18. One is much weaker in body and mind and lavishes affection on the other who receives and leads. The latter is becoming imperious and the other is growing into her image morally and mentally. They spend a good deal of time in reading trashy books and corresponding with men they have never seen. Even on the street they hold hands and in the corridors they cling to each other and kiss often.

18. Very fond of each other, always together. One day D. went to the park with a party and did not ask M. to go. M. was so angry that she left school.

Two college girls. A. fell in love with B. the first week that she was in college. Both were good students and B. was brilliant in some lines of work. Neither were demonstrative and A.'s affection was the greater. A ten minute's call from B. "used to brighten the whole day for her." A. was very homesick at first, but was entirely cured after she knew B. Her happiest days during vacation were those on which she received B.'s letters. The love proved lasting and they have spent as many as possible of their summer vacations together since leaving college.

C. and D. in same college class; intimacy began in the Freshman year and lasted through college. Neither neglected her work but they spent every available minute together. They were not demonstrative in public but it was an understood thing that callers were not wanted when they were together. Used to spend twilight together and were never in a hurry to light the gas. The intimacy was the subject of much comment and few could understand it. C. was bright but superficial; rather demonstrative. Her sense of honor was not high and she was not strictly truthful. D. was straightforward and truthful to the point of bluntness and despised any form of deceit; was rather reserved but capable of intense feeling. She must have known A.'s failings but her devotion to her was unwavering. No one knew the cause of the final rupture, which happened about a year after they left college, but it was a great grief to D. and she was unwilling to speak of C. afterward.

F., 37. "I fell in love when I was in college, and the love has been one of the sweetest and best influences in my life. I thought then as I think now that my friend was the noblest and sweetest woman I ever knew and I know that my life has been blessed and helped by her influence."

Enough examples have been cited to show that love between two girls presents much the same characteristics as that between girls and boys, and that effects vary according to the temperament and ideals of the individuals. The objections to it, however, are far less serious and, except in cases where owing to the character of one of the girls, the influence is bad, non-interference is probably the best policy, though sympathetic recognition and counsel may raise the ideals and hasten

the discarding of objectionable features when they exist. When, however, a girl combines the power of fascination with bad qualities the effects are quite as disastrous in the school domain as in the larger world, possibly worse, since the influence is more direct and there are fewer restraints.

In cases where there is disparity of age the type of affection is usually more idealistic. Girls from twelve to eighteen often fall in love with their teachers, and since complete community of interests, and the intimacy of those of like age is not attainable, show their feelings by sending flowers and other attentions. They are shy and blush if spoken to or teased about their admiration, are happy if they can be near the object of their affection without attracting attention. If the teacher is sympathetic this often ripens into a very close relationship, for the love though differing in quality is by no means one-sided. Teachers are, as a rule, unmarried women and the maternal tenderness which has not found its outlet in motherhood is often given in full measure to her pupils, and often proves the basis of a lasting friendship. Probably this intimacy of teacher and pupil is nowhere carried to so great an extent as in convent schools. There the Roman Catholic pupils have often some favorite sister whom they make their confidant, and to whom they go for confession of an informal kind. And the instinct of motherhood, as strong in these women of secluded life as in others, finds its satisfaction in the care and affection which they give to these children of their adoption. The record which George Sand has given us of her three years of convent life gives with photographic clearness the daily routine for both pupils and sisters, and no one has more vividly described the phenomena of adolescent emotions which usually find their outlet in love or religion or both. At sixteen George Sand was an ardent religieuse and had she then been allowed to follow her inclinations would probably have passed her life in the convent. In some of the French convents the sisters are all women of noble birth, cultured and refined and with the halo of romance which their vocation throws about them, they possess a powerful attraction for their pupils which is sometimes exercised for propagandism, for love and religion lie very close together in a young girl's heart. The following case is a typical one: A brilliant young American girl of nineteen, sent to a French convent, formed a romantic attachment to one of the sisters, a woman of fine intellect and great personal charm. Her influence became so strong that the parents became alarmed and forbade any further Catholic influence on pain of withdrawal from the convent. This ended the propagandism but not the affection.

ATTACHMENTS BETWEEN BOYS.

Friendships between boys which include the romantic element are less common than among girls and appear to develop at a somewhat later age. Some of the highest types of love have been by this class of attachments. The love of David and Jonathan, of Damon and Pythias, Hector and Patroclus, and the numerous examples given in Platos Dialogues are too well known to need repetition. This phase of boy love is by Plato made the highest type of love, the love of the soul, "which has no regard to beauty or money or power, which endures the test of time, which expresses itself in service and sacrifice." To Plato the idea of this type of love as existing between men and women was impossible because the status of woman made any real companionship impossible except in the rare cases exemplified by Diotima. To-day the Platonic ideal is oftenest expressed in conjugal love, but the following cases show that such love in the form conceived by Plato still exists.

Two boys are very fond of each other. Go around with their arms round each other. When one is sent on an errand, gets the other to go with him. If one is away writes nearly every day. Does not think it is good for them; they cannot attend to their work as they ought and are dependent.

7 worships 9. 9 loves 7 but is sometimes bored. They live near each other and play together every day. 7 refused to go into New York to see the "Brownies" because he wanted to be with 9.

14. Used to go every night to see a boy of 15. Thought everything he did was just right.

16, 14. Were usually together and usually in mischief. When apart were pretty good boys. 16 was headstrong and obstinate and was the leader in all mischief. 14 was of a milder disposition and always ready to follow. Observer thinks it was bad for both boys.

16, 16. Were good friends for three or four years and then became very intimate. One was hardly ever seen without the other. Used to go down town together every night. Were called husband and wife. Close intimacy lasted about two years and then gradually died out.

20. Has been intimate with one young man for twelve years. They always travel together and are never out except with each other. Dispositions are alike. Feel lost when they do not see each other for "some few days."

Two young men in business in new always travel together and lunch together.

18, 20. 18 went up to 20 threw his arms round his neck and said "How I love you! You're the only one I ever loved. I will always be your friend. Come to me whenever you want anything, and if I can get it you shall have it." 18 was jealous if 20 went with any other young man.

20, 25. They show their affection for each other by doing favors, lending things, by acts and words. Makes them selfish for they do not go much with other boys. The boy who gives the most affection is the one who is mentally and socially inferior to the one to whom it is given. The boy who receives it is a good scholar and athlete. He is one who always liked to be petted.

M. 14, M. 17. Both fine boys, the affection between them was almost

lover-like and frankly expressed though there was never any excessive exhibition of it. The younger was intellectually superior, full of fun and mischief. The elder, slower but of solid worth, was in a way a balance wheel for the younger. Both are men now and the friendship continues. The elder is married.

M., 25. I do not know that I can fully express my feeling for A. He seems too much a part of my life. I cannot think of anything that would be right that I would not do for him. We can no longer be together as when we were boys but if he needed me there is no sacrifice which I would not make for him. I feel that much of that which is best in me, I owe to his influence.

Two young men about twenty-five, a great difference in education, A having a college education and B having left school at ten to support his parents and having acquired only such education as he could pick up in the spare hours of a laborious life. A has helped B greatly in this way. After more than a year's acquaintance, they became room-mates and B's devotion to A increased to such an extent that the young lady to whom he was engaged was, at times, quite jealous of his attachment. B is always ready to do anything possible for A and writes him affectionate letters now that they are separated. A says of B: "He seems to have as much real tender devotion for me as my mother has. I don't feel that I can tell my affection for him as I have the things he has done for me. I am very proud of them and they mean more to me than any one knows. I love him and there is nothing in my power which I have not done for him. I feel, however, that he loves me more devotedly than I do him and it humiliates me. He is a man in every sense, of the word and glories in his manhood."

For the study of the love of later adolescence biography and letters furnish abundant examples. The letters of Marianna Alcafarado (1) and of Heloise to Abelard lay before us the very hearts of these women. In both cases we are struck by the utter self-abnegation and devotion and the struggle to hold fast the ideal of the man to whom everything had been sacrificed. The sole reproach which Marianna utters when she realizes that her lover is faithless is that he has destroyed her ideal of him. All other pain and suffering she can bear even gladly "had you but let me love you always." And through all the letters of Heloise, there is an undercurrent of passionate refusal to attribute any blame to the man whose cold and cruel selfishness ruined her life.

Of happy lovers we have fewer records, but history has preserved for us the picture of Vitoria Colonna's devotion to the Marquis Pescara, who could send her young husband to battle with smiling face lest her tears might dim the ardor of his courage, and we have one instance in the present generation where a prince¹ has laid aside his title and become a commoner that he might marry the woman he loved. But love stories do not belong to the life of adolescents only. Romance has come late in life to many of those who have created romance for others. Hawthorne, Tennyson and Elizabeth Barrett were forty

¹Oscar, second son of Oscar II, of Sweden.

when they were married and their happiness was almost ideally perfect. Of Mrs. Tennyson it has been written "that she walked by his side for more than forty years, quickening his insight, strengthening his faith, fulfilling his every heart's desire." There is no selfish absorption in this type of love. The world is the richer for the love life of these men and women who found in each other the inspiration for their best work. In contrast with these we have the pitiful love story of Keats who, with ideals so high that perhaps no woman could ever have fully realized them, fell in love with a pretty face and graceful figure, knowing all the while that the graces of heart and mind which he so ardently desired were not hers. He seems to have realized from the first that he had been captivated by the physical charms of the pretty, frivolous girl, who doubtless loved him after her fashion but could be quite content to amuse herself with some other admirer in his absence, and who was quite incapable of the all-absorbing devotion which alone could satisfy her poet lover. Yet such was the power of his infatuation, which was perhaps rendered morbid by ill health, that he wore himself out in the struggle between his ideal and the reality so hopelessly below it. Of the effects of this type of love Browning has furnished a study in *Andrea del Sarto*.

Starvation for Love. Through force of circumstances there are lives in which the impulse to love is repressed or thwarted in its normal development, and the effects of this are as important for psychology as the study of the varied expressions of the love impulse. Perhaps no woman throughout her childhood and youth was ever more heart-starved than Margaret Fuller. The forced growth of her intellect robbed her of her childhood's due; and her young womanhood, though crowned with intellectual success, left her with heart hunger still unsatisfied. In the very zenith of her success she wrote "I shall always reign through the intellect. But this, the life! Oh my God! Shall that never be sweet?" And again: "There comes a consciousness that I have no real hold on life, no real permanent connection with any soul. All life that has been or could be natural to me has been denied." Though her happiness came to her late in life, soon after the birth of her child she wrote, "In earlier days, I dreamed of doing and being much but am now content with the Magdalen to rest my plea hereon, 'She has loved much.'" In the life of the brilliant Russian mathematician, Sonya Kovalesky, we read the same pathetic longing for the satisfaction of her woman's heart. Often this craving, when it fails to find personal satisfaction, expresses itself in philanthropic work, especially in that for the benefit of children. In more restricted lives it finds an outlet in the

love of animals and flowers, which with some lonely women becomes a passion.

Miss Wilkins, Annie Trumbull Slosson, and the author of "Lovey Mary," have described typical instances of this. Probably a healthy nature always finds some outlet of service for the love and tenderness that have been denied expression in conjugal and maternal love, but when this occurs in connection with neurotic tendencies, various pathological phenomena (14) may result, hysteria (6), manias, the peculiar type of insanity known as "old maid's insanity," in which respectable middle aged women of the most austere lives suddenly become possessed by the delusion that some man with whom they perhaps are merely on terms of ordinary acquaintance is in love with them; patheticism, melancholia, and even suicide. Whether these phenomena are to be considered as direct or indirect results due primarily to loss of interest in life engendered by the already existing neurotic tendencies, is as yet an unsolved problem.

In reviewing the different phases of emotion of which types have been given, a great difference of quality is observable between the earlier and later adolescent manifestations. The intimacies of earlier adolescence are apt to be based largely on either physical attractiveness or external circumstances which have no connection with character, and they have, as a rule, little permanence, though frequently considerable intensity. Though reasons for attraction were not given in a sufficient number of cases at each age to justify the plotting of a curve, the following figures are significant. In one hundred and five cases between the ages of seventeen to twenty-five the qualities named as attractive to women in men were in the following proportions: Moral, 50.2%; Mental, 10.4%; Physical, 23.6%; Manners, 10.9%; while in 37 cases between the ages of twenty-three and twenty-five the proportions were: Moral, 87.2%; Mental, 20.1%; Physical, 15.3%; Manners, 6.5%. Very few of the younger cases gave definite reasons for being attracted, but those cited show the character of the attraction. These emotional developments are not confined to those of opposite sex, but exist between those of the same sex, and apart from differences due to social customs exhibit very much the same characteristics.

With the dawn of adolescence and corresponding to the physical development, there is a great influx of emotional activity. The tendency to self-sacrifice and devotion hitherto dormant asserts itself. Egoism, while on the one side it is intensified, on the other passes over into altruism: Social and ethical impulses arise and new ideals are formed which exert an influence upon action scarcely comparable with that of childish

ideals which are frequently mere fancies and quite inoperative as regards action. The importance of the ideal in adolescence can scarcely be overestimated, and the character of adolescent love affairs is largely determined by the character of the ideals. Its importance is recognized in even the most materialistic theories on the subject. Joanny Roux,¹ in his analysis of sex love, recognizes three phases in its evolution: physical attraction, the crystallizing stage in which the ideal is formed, and lastly, the stage of systemization in which the ideal is fixed upon a definite object. Upon this third phase depends the persistence of love and fidelity to the individual. A Russian woman, Anna Sergieff, in a pamphlet published in Leipzig, under the title "*Der Geschlechtstrieb, Die Idealisierung. Die Liebe*" discusses these same three factors but places *der Geschlechtstrieb* and *Die Liebe* in opposition to each other, and lays the stress upon *Die Idealisierung* as the important element in love. That such an opposition may exist is true, but in the broader and higher meaning, such a statement is to deny that men and women are attracted to each other by the qualities which are most essentially manly and womanly, and to detract from the ideal. And the view of Joanny Roux seems equally narrow in that it lays too much emphasis on mere physical attraction, and fails to recognize any type of love save the egoistic one. But in the emphasis laid upon the ideal both authors are psychologically true to fact. What a man or woman becomes depends largely upon his or her ideals. In all other things may loss be suffered, but if the ideals be degraded the loss is irreparable, and this is especially true in regard to the love between men and women. Such love became possible only when women ceased to be a chattel, bought and sold like any other, and the higher development of love came only when the social status of women rendered true companionship possible. And it is because the ideals of love among many of the boys and girls in the public schools are so far below what they should be that many of the cases cited in this paper are possible. False ideas of the relations of the sexes are acquired in the lower grades, and the mischief begun in childhood meets no corrective in the higher grades. Much of the reading done by girls and boys during early adolescence is of a highly emotional character, and in many cases the chief amusements are theatre going and social entertainment. Under such conditions a craving for excitement is created, and school work becomes distasteful and burdensome. Frequently the physical overstrain which results is attributed to overwork in school instead of the emotional drain which taxes the sys-

¹ *Psychologie de l'Instinct Sexuel* (23).

tem to a far greater extent. The studies of Marro (21), Lancaster (17), and G. Stanley Hall (13), have shown that emotional excitement during the early years of adolescence tends to precocious development of mind and of body. Such precocity is always a danger, and, if there are hereditary neurotic tendencies, may result in permanent injury, which, under suitable conditions, might be avoided. Dr. Hammond (14) considers that "Attendance at theatres and operas, the cultivation of music, the reading of poetry and novels, the study of art and any other influence capable of developing the emotional system at the expense of the purely physical and intellectual, favor the growth of hysterical tendencies." If this be true of such agencies as art and music, it is far more so of the excitement of these early adolescent love affairs. In the psychological realm lies a subtler, though quite as real danger. In the transient character of these attachments and their frequent repetition lies also the danger that the power of "crystallization" may suffer and with it the capability of an enduring affection.

It has frequently been asserted in recent years that in America the ideals of the family and home are degenerating and that this is due to the new industrial position of woman which removes her from the home. Doubtless to some extent this is true but is there not a more fundamental reason in the fact that so many boys and girls grow up with no training in the fundamental laws of sex, with false ideals of their relations to each other, and of self-sacrificing, enduring love upon which the foundation of home and family is built.

The present study is merely suggestive, and a wide field has been left untouched, but in thus presenting the material in condensed form, it is hoped that the importance of the subject and the need of further study along this line has been emphasized.

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WHY PUPILS DROP OUT OF THE HIGH SCHOOL.

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Many strange statements have been made in regard to the number of pupils that drop out of school. Folkmar (1), in an elaborate investigation of the "Duration of School Attendance in Chicago and Milwaukee," reached the conclusion that only about 3 per cent. of the pupils who enter the public schools remain until the high school is reached, and that only about three in every thousand who attend the public schools finish a high school course. Ex-State Supt. Chas. T. Smart, of Ohio, in an article in the *Arena* for September, 1894, states that 50 per cent. of the pupils who enroll in the public schools of that State drop out of school by the end of the fourth school year, that only 3 per cent. remain until the high school is reached and that less than 1 per cent. complete a high school course. Prof. Ellis (2) in a paper read before the N. E. A. last year maintained that little over 5 per cent. of the pupils entering the elementary schools remain to enter the high schools, and that only about two per cent. of the original number entering the elementary schools graduate from a secondary school.

These figures and interpretations of statistics, though often quoted and generally accepted as true, are, nevertheless, misleading if not actually false. It is true that in 1902 only 734,760 students, or 4.2 per cent. of the entire school enrollment, in the U. S. were in secondary schools, public and private, but it is unjustifiable to conclude from this that only 4.2 per cent. of those who ought to attend the secondary school ever enter it. If we disregard all loss from death, failure of promotion and the like and assume that the same number of pupils enter school each year and that all remain to complete an eight year elementary, and a four year high school course, it is clear that there could only be in the high school or in any four years of the elementary school one-third of the entire school population at any one time. Obviously there could not, in any case, be in the high school 100 per cent. of the entire possible school enrollment as those who claim that only 5 per cent. ever reach the high school apparently assume but only $33\frac{1}{3}$ per cent. of this total school population less the necessary losses through death, failure of promotion and the like.

Boynton and Parsons (3) have rather cleverly pointed out

the fallacy in the usual method of interpreting school statistics and the absurdity of the current statements quoted above. By the same method and process of reasoning by which these conclusions are usually reached Parsons has shown that it could be proved that only 8 per cent. of the school population ever enter the first elementary grades and that less than 12 per cent. have ever been born.

Curiously enough Mr. Boynton while pointing out the current fallacies seemingly drops into the opposite error in his illustrative table of taking the actual school enrollment as equivalent to school population, which is a very different thing. If all the children of school age, say between the ages of six and eighteen, were enrolled in the schools and equally distributed in the grades, then $33\frac{1}{3}$ per cent. of them would be in the high school as already pointed out. But the total school enrollment is not the same as the population of school age: hence we cannot say that $33\frac{1}{3}$ per cent. of the total school enrollment represents the possible high school enrollment or the number who ought to attend. The possible high school enrollment evidently will be more than this. To ascertain the actual number who ought to attend the high school during any one year we must take the total number of pupils of school age and make all necessary deductions for losses through death, illness, failure of promotion and the like, which will give us the possible enrollment for all the schools that year. The number who ought to attend the high school that year, or the total possible high school enrollment, will be one-third of this total possible enrollment for all the schools and not one-third of the actual enrollment of all these schools as Boynton apparently maintains. Parsons took the total school population or all of school age, estimated all necessary losses through death, failure of promotion and the rest and states that the ratio of the actual to the possible enrollment for the high schools of the United States as a whole was, for 1902, 38.8 per cent. That is, 38.8 per cent. of all who ought to be in the high schools are actually there.

It is not easy to state in accurate figures what percentage the actual number of pupils enrolled in the high schools at any one time is of the possible number. It may be said that the possible number is $33\frac{1}{3}$ per cent. of all the children of school age less the necessary losses through illness, lack of promotion, death and the rest. Again it may be said that the possible number is $33\frac{1}{3}$ per cent. of all those who have actually entered the schools during the last twelve years minus those who drop out on account of illness, death and the like. Or still again it may be said that the possible number in the high schools may be represented by those who have graduated from the grammar schools during the preceding four years minus the neces-

sary losses already named. As a concrete illustration let us take the city of Worcester.

In the first case, with all the children of school age in the schools, with only twelve grades, with no loss through death, etc., and an equal distribution of the pupils throughout the grades, there could be in the Worcester high schools at any one time only $33\frac{1}{3}$ per cent. of this total school population. What the number would be in this purely hypothetical case we need not stop to consider. Again it may be said that $33\frac{1}{3}$ per cent. of the actual school enrollment should be in the high school, but this is not true. For, if we exclude all those of school age who never enter any school we can only say that $33\frac{1}{3}$ per cent. of all that have entered the schools during the last twelve years minus all necessary losses (a very different thing from $33\frac{1}{3}$ per cent. of the actual enrollment) represents the possible number of high school students. This might be approximately estimated from the school records,¹ but as we are concerned merely with the high school it will be sufficient for our purpose to take the number who finish the grammar school course, as representing approximately the number the high school should attract. The high school is not responsible for those who have dropped out before this time or who have never attended any school. It is responsible, however, if it does not secure and hold the greater part of those who graduate from the grammar schools. During the four years prior to 1903 2,989 pupils graduated from the Worcester grammar schools. This represents the possible number of high school pupils for 1903.² But the actual number enrolled for this year was only 2,040. Thus it appears that even in a favored city like Worcester only about two-thirds the number who might attend the high school are actually enrolled. The actual attendance is only 68.25 per cent. of the possible.

We have no adequate statistics to enable us to make a similar estimate for the United States as a whole but Parsons's figures, probably the most reliable that we have, give us a more striking result as stated above. Making allowances, therefore, for all these corrections, and setting the facts in their most fav-

¹Supt. Lewis comparing the number of students entering the Worcester high schools with the number who entered the first grade of the schools nine years earlier, after making necessary deductions, and additions, estimated the actual number of students entering as about 33 per cent. of the possible number.

²This number is at best but an approximation. It is at once too large and too small. It is too small because some pupils complete the grammar school course who do not graduate, others drop out before completing the course. It is too large because in Worcester a part of those who graduate are not fitted to enter the high school without further preparation.

orable light, it still appears that less than half of those who might enter the high school ever do attend. Of those who enter less than a fourth remain to complete the course. According to Prof. Ellis (2) and others only about 20 per cent. of those who enter the high school ever finish the course. Half of the boys who enter drop out before the beginning of the second year in all sections of the country, after which the number dropping out each year varies from 50 to less than 10 per cent. Most of the girls who enter complete the course, the number of girls attending the high schools last year being about 50 per cent. greater than the number of boys, the number graduating about 100 per cent. greater than the number of boys.

Supt. Greenwood (4), in a study of fifteen selected city high schools, found that less than 14 per cent. of the pupils in these selected schools remained to finish the course, showing that these selected schools with highly cultured teachers and elaborate modern equipment hold fewer pupils than the average high school with poorer equipment and teachers.

What, we may ask, do these statistics mean? Why do so many of the girls and four-fifths of the boys who enter our high schools leave almost as soon as they have sampled them? Why do more than half of the pupils who ought to complete a high school course never attend it at all? Three studies of the problem have so far been made.

Prof. Ellis (2) asked fifty-six high school principals in various sections of the country why so many pupils left school? The reasons they assigned in order of importance are as follows: (1) Desire to make money; (2) Lazy, ashamed not to pass; (3) Needed to support the home; (4) Commercial ideals at home; (5) To enter a factory or take up a trade; (6) To enter a business school and a few others were named.

S. D. Brooks (5), who induced 111 selected superintendents to make a record for each student who left school giving age, grade, sex, nationality, health, temperament, mental ability, class standing, cause of leaving school, financial standing of parents, etc., found that for the 400 pupils reported 37 per cent. of the boys were said by the teachers to have left school to go to work, 23 per cent. because of indifference and failure in work, 11 per cent. because of a dislike for authority, 9 per cent. desired activity, the rest dropping out because of ill health, bad conduct, truancy and the like. 38 per cent. of the girls were said to have left because of ill health, 17 per cent. to go to work, 27 per cent. because of indifference and failure in work; the rest, 18 per cent., because of dislike for authority, lack of encouragement at home, to go to other schools and the like.

Supt. G. E. Gay (6) secured answers from 1,436 boys and

girls in forty-four towns and cities, who had left Massachusetts high schools before graduating and found that 23 per cent. left because of ill health, 34 per cent. because their services were needed at home, 36 per cent. because they had lost interest in and acquired a distaste for school life, and 7 per cent. left to attend some commercial school. His study does not distinguish between boys and girls.

C. H. Thurber and De Yoe (7) asked the leading high school principals and superintendents of the United States what changes in the present high school system they would advise to draw and hold the high school boys. Separate schools for the sexes, they thought, would do little good. The introduction of more manual training into the course, the establishing of regular commercial high schools, increasing the number of male teachers in both the high and grammar schools, the improvement of the grammar school by introducing new studies and bringing it into closer articulation with the high school they thought would help keep the boys in school. Giving closer attention to the care and needs of the individual, special consideration of the demands of the adolescent, improvements in the method of discipline (*i. e.*, treating the boys as young men), the enrichment of the grammar school, improvement of the teachers in certain ways, adapting the course and work to the interests and needs of the 99 $\frac{9}{10}$ per cent. instead of to the few who go to college, were the other remedies suggested by them.

F. H. Law (8) ascertained the age at which pupils dropped out of school in a certain slum district in New York and asked the teachers in this section of the city to propose a remedy for the early dropping out which he found. Most pupils, he found, left school when only 13 or 14 years of age and left mainly because they were poor, half of them going directly to work. The remedies which the teachers proposed were, changes in the methods of instruction (*i. e.*, better questioning and less lecturing and the like), the introduction of art into the schools and making the school attractive and beautiful, the establishment of more utilitarian high schools, better equipment and buildings and the abolishing of the sharp lines drawn between the primary, grammar and high school grades so that pupils would not think they had graduated when they got through the grammar school.

Each of these studies throws a certain amount of light on our problem but it seems to me that the real causes for so many pupils dropping out of school are not yet fully known. Only the pupils themselves can describe the discouragements and difficulties which they meet in school or tell how the work is adapted to them and meets or fails to meet their needs. The remedies proposed by teachers, principals and superintendents

as collected and set forth in the studies of Thurber and Law have a certain value because they are the opinions of men who have had experience and know the conditions and see the causes from the teacher's point of view. But we need to know more about the real causes for dropping out before a remedy can be proposed. The causes for pupils leaving school, given by the principals and superintendents in the studies of Ellis and Brooks, as Prof. Ellis has well pointed out, do not give us the real reasons for pupils leaving. At best they only tell us what certain teachers think. They tell us that pupils fail, are indifferent, lose interest, go to work and the like, but this is not enough. We must find out why they fail in their work, why they feel indifferent, why the school is not interesting them, why they would rather go to work than go to school if we would know how to keep them in school. Supt. Gay is the only one who has asked the pupils themselves why they left school. But from an examination of his study it appears that in every case the pupils answering his questions put a cross after some one of the five reasons he had printed on the circular submitted to them, leaving us very little wiser than we were before in regard to the pupil's own reasons for leaving school as seen and felt by himself. To ascertain why so many boys and girls drop out of school we should go to all who actually left school before completing the course and get from them a frank and accurate description of all the influences which caused them to leave. Such data it is practically impossible to get, but we may consult their classmates and chums who, no doubt, know quite as well why their companions dropped out of school and how they thought and felt about the work of the school as they did themselves and will be more apt, perhaps, to fully describe what they know about the causes, than would those who have actually dropped out. It is not such a personal matter for them. To set forth the causes for dropping out of school as seen and described by the pupils themselves, and to present their point of view, is the purpose of this study.

METHOD.

773 seniors (136 m.—637 f.) and 278 first and second year pupils (127 m.—151 f.) from fifteen cities and towns in Massachusetts, Rhode Island, New York, Indiana, Illinois, Missouri, Colorado, Montana and Utah were asked to write compositions on the subject "High School Education," giving a true, complete, frank statement of their own personal feeling and experience concerning some or all of the following ten points:

1. What a high school ought to do for me, and what is a high school for?
2. In what ways has the high school helped me most?

3. Describe some sympathetic teacher you have had in the high school or the reverse (*i. e.*, a teacher who understood your needs and did you much good. State sex).

4. Some points in which I have not been understood. Why?

5. Why going to high school pays or the reverse.

6. Why so many boys and girls drop out of school.

7. Useless studies in high school courses. The most popular study in our school. Why?

8. My usual "Round" after school.

9. What my parents think about high schools.

10. Some improvements in the high school which I would suggest.

These questions were sent to the teacher of English in certain representative schools who presented the work to the pupils as an exercise in English Composition, using such methods and precautions to secure a free, unhampered and complete discussion of the various points as she thought best. Most of the papers were never seen by any teacher in the school where prepared, the teacher or principal telling the pupils when the work was assigned and its purpose explained that they would not examine the result. Most of the pupils, although told that it was not necessary to do so, signed the papers they wrote.

One hundred and sixteen out of the 136 senior boys or a little more than 85 per cent., and 567 out of the 637 senior girls or 89 per cent., selected and wrote on the sixth point, "Why so many boys and girls drop out of school." All the first and second year pupils were asked to discuss: "Why so many *boys* leave school." All discussed this point, making a total of 961 (243 m. and 718 f.) who described the causes for pupils dropping out of school. Very few wrote on all the ten points. Some writing on but a single point. Most omitted from two to three of the ten points.

The reasons for pupils dropping out of school described in these 961 themes were discussed so earnestly and in such detail that one could but feel that the pupils knew why so many of their classmates dropped out of school. Many said they did not know why all the boys left but the reasons they gave had caused certain ones whom they knew to leave. Most mentioned the reasons given by those that had actually dropped out or were talking of dropping out, often quoting their exact words. A number described what had tempted them at certain times to quit and often told what finally induced them to stay. It was not an unusual thing for pupils to write from three to four hundred words in describing these causes showing their knowledge of and interest in this subject.

The various causes described may be roughly classified into four groups according to the following table. First the commercial or utilitarian group, causes due largely to the love of money and conditions outside the school; second, the individual group or causes due more especially to the nature or pecu-

liar characteristics of the pupils themselves; third, the school group or causes that have to do with the work of the school; and, fourth, a miscellaneous group made up of causes, not often described, which do not readily fall under the other heads.

The total number given an opportunity of writing on all the ten points was 1,051 (263 boys and 788 girls).

The total number discussing this point, *i. e.*, describing the causes for pupils leaving school, was 961 (243 boys, 92 per cent. and 718 girls or 91 per cent.).

The causes described and the number of pupils mentioning each cause named is shown in the table given below.

TABLE.

	No. mentioning this cause.			No. mentioning this cause.	
	Boys.	Girls.		Boys.	Girls.
COMMERCIAL GROUP.					
1. Desire to get money,	56	106	12. Desire for activity and dislike for restraint,	10	15
2. Needed to support the home,	113	349	13. Lack of patience, perseverance and grit,	14	27
3. To get started in a business or trade,	22	36	Total number mentioning causes of this group,	136	480
4. To go to commercial school,	3	13	SCHOOL GROUP.		
5. Lack of encouragement at home,	15	60	14. Discouraged,	76	217
6. Feels like he should support himself,	10	24	15. Loss of interest,	90	217
Total number mentioning causes in this group,	219	588	16. Failure to see the value of education and school,	34	58
INDIVIDUAL GROUP.					
7. Ill health,	30	145	17. Dislike for certain teachers,	24	73
8. Lack of ability,	8	57	18. Overwork,—too much required,		42
9. Natural lack of interest,	4	14	19. Wanted to go to work,	21	71
10. Lack of ambition,	19	66	Total number mentioning causes of this group,	245	678
11. Laziness,	51	156	MISCELLANEOUS CAUSES.		
				29	69

COMMERCIAL GROUP.

Classifying the causes described as suggested above we have first a group of causes due to the commercial or utilitarian ideals held by the pupils or parents or both. The desire to get money, to get started in a business or trade, the boy's desire to make money for himself so he can be independent, the desire to go to a commercial school that he may sooner get a job and be making money for himself, the avaricious desires of certain parents who think their children already know enough and therefore take them out of school to help make money for

them, all cases where pupils had to drop out of school to help support themselves or family were placed in this group.

Desire to get money. The boy who said: "Many boys drop out of school because they begin to get tired of 'being broke,'" has well expressed the feelings of the 56 boys who ardently describe the desire to get money as a cause for leaving school.

"Boys in high school feel too big to ask their parents for money so drop out of school to go to work;" "They want to have money of their own;" "The desire for making money is stronger than the desire for an education;" "They want to have a good time and do like other boys which takes more money than they have;" They "think they can get more money to spend and have a better time if they go to work;" They "think it a waste of time to go to school when they might be working and earning money of their own" are the expressions most often used by the boys. The girls say: "A boy don't care for books like a girl;" "The love of money and the desire to make it come early to him;" "They get in a hurry to earn money for themselves;" "They want to earn their own money so they can spend it as they please;" "If a boy gets a chance to make money he lets study go;" "When a position is offered them boys want to accept;" "They have a strong desire to make their own money and not be dependent upon any one else;" "They think if they could work and make their own money they would be more like men and treated so;" "Many boys think if they could only go to work and earn a few dollars a week their fortunes would be made;" "They think it looks big to go to work and draw money and always have some to spend." What many boys think about the relative importance of going to school comes out in many different ways. One girl said: "Many boys think to be well versed in the ways of the world is better than any books." Another: "When boys can get a job and earn their own money they think school a place for babies." A girl of 15 puts it thus: "Boys think it looks babyish to be in school studying with girls when they might be making money, getting started in life and making something out of themselves."

To get started in life. Closely associated with the desire to make money is the longing "to get started in life," "to get into some business or trade." "Boys get discouraged with school because they do not like to wait so long before they can do something really worth while;" "The high school is too slow;" "It's too late to learn a trade after we graduate;" "They think they must get started in life" are the expressions most often used by the boys. A boy of 16 writes:

"When you first enter school you hear many boys expressing themselves something like this: 'I am going to school until I graduate.' I heard a classmate of mine say that very same thing. We advanced along together until last year when I did not see him at school. I asked him why he was not coming to school and he said he had a good job with chances for promotion. . . . I saw this same boy the other day and asked him if he would rather work than go to school. He answered, work, because he was getting good money and learning a business. So we see why many boys drop out of school. It is to learn a business or to get money which is a very tempting thing for a boy." Another boy of 18 says: "Some boys think, and they cannot be convinced otherwise, that it is a perfect waste of time and energy to spend

four years in a high school which could be, as they say, more profitably employed in getting a start in life." The girls describe this cause in a similar way. The girl who said: "I think a great many boys feel it necessary 'to be up and doing' as soon as possible" pretty accurately describes this cause as seen by the girls. A girl of 16 writes: "I have seen many boys drop out of school and upon asking them why they left a great many answered: 'Oh, I haven't time for school or I guess I know enough.'" Boys are naturally conceited. When they reach a certain age they think what they don't know is not worth learning so they know no better than to stop school." Another girl of 18 writes: "Some boys are anxious to get into business and be known as business men while many *girls* seem to have the idea that as soon as school life is over they are ready to marry and as that seems to be the chief ambition of their lives they drop out of school and sit at home waiting for their fate to come along."

The enticing temptation of being offered a good position is vividly described by both boys and girls and is the cause of many boys leaving school in all cities where the demand for boy labor is especially great. Many boys were said to be influenced by boys not in school who had a good job. The following expressions were most often used:

"Was more attracted by a position than by the school;" "Was offered a good position with chances for promotion;" "Some boys think that time is wasted which is spent over studies they will forget as soon as they leave school and will probably never need, so when a good position is offered them they leave."

Lack of encouragement at home. Many parents and homes are described as being so dominated by the desire to get money that pupils are often taken out of school to help make it.

A boy of 15 said: "One reason for so many boys dropping out of school is that some parents think when a boy gets enough education to be able to work problems he must go to work and help support the family. The girls stay in school until they graduate because they can't do much to earn money until they get a good education while the boys drop out about the eighth grade to go to work." A girl of 22 writes: "The home life has much to do with the school life of boys and girls. Some parents are avaricious and the children are constantly reminded of the expense of their education. This leads many boys and girls to quit school and go to work at the first opportunity." It is absolutely necessary, it seems, that pupils be encouraged by their parents at home. A boy of 18 writes: "I think but for the encouragement of my parents I would have left school long ago. For many times I felt tired of it all." Another boy said: "We need help and sympathy at home as well as at school." This encouragement and help must be wisely given else it does more harm than good. A girl of 17 said: "Many children are sent to high school on the condition that they keep up to the standard in all their lessons and that they are to have but one chance. This the teachers do not know and at the end of the quarter their report cards do not tell the story expected by their parents so they drop out." A boy of 17 said: "A boy is apt to drop out for this reason. His expenses begin to be greater and it may be hard for his parents to meet them. He then begins to feel that he is old enough to relieve his parents. The desire to earn his own money becomes very strong, and unless his parents are mindful of the advan-

tages of education in later life and force him to remain, he will start to work and perhaps never return to any kind of school again." Some parents take little interest in what their children do at school. As one boy expresses it: "Some parents don't care what their children are doing, therefore the children lose interest and finally drop out. They start to school because it is the fashion or because they want to see what it is like. When they find that there is much uninteresting work to be done they turn to other more attractive things." Another said: "Some have fathers and mothers who take no interest in their children's studies and want them to be doing something else outside of school hours. Every one knows that work in the high school cannot be kept up this way. These, too, become disheartened and leave." Others say: "Many pupils drop out of school because they are not properly urged at home to persevere and prepare themselves for something worth while;" because "they are surrounded by people with no education which so pulls them down that they do not care to gain an education themselves;" because "their parents think it a waste of time for their children to stay in school and learn such impractical things." "I think," wrote a boy after mentioning several reasons for withdrawal from school, "I think, all these reasons originate from home training. This knowledge I have gained from my own parents who time and again lectured, as it were, on the value of a high school education." Then after citing the case of a boy of exceptional ability who left school because he was not encouraged at home, he said: "If parents were able to see what a high school education would accomplish I think there would be a marked decrease in the percentage of pupils who leave school."

Desire to be independent. The desire for independence and self support is strong in all high school boys according to the reports. Many boys speak of it as a laudable desire to assume part of the burden of their own support. More voice the sentiment of the boy who said:

"I think the reason so many boys leave school is because they do not have as much money as they would like to have and are getting too big and have too much pride to ask their parents for the required amount to meet the expenses of school."

The girls say a feeling of independence prevails among all boys. "They get restless to make their own living and to be independent of all assistance and help." As a girl of 17 puts it:

"A boy would rather be out of school working, than studying Latin while his father supports him. He is anxious to be a man and be making a living for himself." Another says: "Boys are ambitious and think it childish to go to school and be supported by some one else. They want to work for themselves so when they want any money they won't have to go to their parents for the needed sum."

Going to other schools was only mentioned a few times as a cause for pupils leaving school. One girl, however, seemed to think if all business colleges were done away with fewer boys would leave school.

One said: "They left to go to commercial schools because they could get a position quicker." Another said: "Not a few of the studies taken in high school are seldom used outside of the schoolroom, and where a pupil is forced to make his own way or contribute to the sup-

port of his parents, what is more natural or reasonable than that he should drop out of school and enter a good business college." Another said: "The high school as it is to-day does very well for those who can go on to college but for those boys and girls who must, at an early age, earn their own bread by honest toil, it has almost nothing. . . . If more practical, every-day studies could be introduced fewer boys would drop out of school."

INDIVIDUAL GROUP.

Next comes a group of causes dealing more especially with the nature and characteristics of the pupils themselves. Ill health, laziness, natural dislike for study and books, desire for activity and dislike for restraint, lack of ambition, over-sensitiveness, lack of patience, perseverance or grit, certain individual peculiarities and adolescent traits were frequently mentioned as causes for pupils leaving school and belong in this group.

Laziness, mentioned by 51 of the boys and 156 of the girls, seems to be an important cause.

The girl who said: "I think pure laziness is the chief reason for so many boys and girls dropping out of school" expresses very well the thought of all who describe this cause. A girl of 16 wrote: "Of course school means hard work and I feel discouraged enough sometimes to just drop out myself. It is nothing but study, study, study from morning till night." The following expressions were most often used. "They expected school to be a snap and found that it meant work, so quit;" "They are too lazy to persevere, too indolent to work and get tired of their teachers always scolding them;" "They enter school for the fun of it and quit when the lessons get hard;" "They can't run around at night and have a good time and get their lessons too so quit to have the good time." One girl said: "Many pupils begin in high school with the idea that it is all going to be a bed of roses, but when they find that the rose bed has thorns they decide they don't need a high school education and quit." A few girls mentioned cases where boys had quit school "for the mere pleasure of loafing." The boys also think laziness an important cause. A boy of 18 said: "The main reason for dropping out of school is that when school begins many have a short-lived ambition to go through school, but finding it no snap like they supposed they drop out." Another says: "The reason why so many drop out of school is not because circumstances compel them to do so, but because a little solid work bores and frightens them. Pleasure is much more alluring to the majority of young people than study and school." "Many," said one, "cannot decide in favor of school when pleasure and ease are the other happy alternatives."

Ill health, described by 145 of the girls, was rarely mentioned by the boys and was never given as a cause for boys dropping out. A few boys described cases where sickness compelled certain boys to miss school a few days, causing them to get behind in their work, which so discouraged them that they would not come back. Many girls were described by them as breaking down under the strain of dancing half the night and working at school the next day. But the girls considered ill health a more serious cause. A few made it the most important cause

while others mentioned it as one of the most important causes. All made it refer to the girls. It was most often attributed to the lack of exercise, to over-work or worry caused by the work of the school.

They were "not strong enough to stand the strain;" "They broke down from over study;" "Were not strong enough to do the work required;" "Had home duties which with the work of the school proved to be too much" and similar expressions were most often used. One girl said: "It (school) is like the struggle for existence. Only those mentally and physically strong can survive."

The excessive home study and over-work mentioned as a cause by 42 of the girls was described as causing neglect of exercise and worry which so impaired the health that it was necessary to drop out of school. One girl in describing laziness as a cause for pupils dropping out of school said: "When I asked a girl, I know, why she quit school she very seriously answered: 'I hate to climb the stairs.'"

Desire for activity. Most of those who said pupils quit school because they wanted to go to work gave as the reasons, to get money, because they were discouraged or disappointed with the school. But not a few gave as the real cause for this desire the boy's innate longing for activity which they describe in the following words:

"Boys can't be still so long and study;" "They hate to be penned up all day;" "They don't like to be kept in restraint." A boy of 17 said: "After boys have been through the ninth grade or first year high school they begin to think they know enough and want to go out to see what they can do." Another of 14 said: "Some boys start to high school and do very well for a while. Then they just sit and dream and do not get their lessons. They would rather go to work where they do not have to keep still than go to school and sit still and study and not talk." A girl of 13 writes: "I know a boy of fourteen who does not like to go to school. He is of a very roving nature and it seems like he can't keep still or keep his mind on his lessons. Sometimes he will go to school two days out of the week and miss three. By so doing he got behind in his studies, lost all interest in school and quit." A boy of 17 writes: "The reason so many boys leave high school is because they become restless and tired of books and wish to do something in which immediate results are obtained. I don't know about girls; let them speak for themselves."

The lack of Determination, Patience, Perseverance and Grit is described as the cause for some pupils dropping out.

"Boys lack the patience of girls;" "Any little thing stops them;" "They get discouraged when they fall behind;" "They don't have the grit to win out;" "They lack the nerve it takes to succeed;" "Can't get down and dig;" "Lack perseverance of which it takes a great deal now a days in school;" "Fail to apply themselves and lose the courage it takes to 'stick it out;'" "Are not able to concentrate their minds on their work;" "Don't know how to study," and the like expressions were most often used.

The lack of ambition was mentioned by 65 as a cause for pupils leaving school.

As a boy of 18 expresses it: "Some boys don't care to rise any higher in life than a common laborer." Another said: "Girls have higher ambitions than boys which leads them to do what is best for them." A number were described as thinking they already knew enough. All these are sure to drop out unless the school can some way create a desire in them to make the most of themselves. One boy very seriously remarked: "The weak ambitions and scanty enthusiasm of many boys for educational affairs generally develops into an office boy."

Not only should the student have a strong, unwavering ambition to succeed in school and "make the world know he is alive," but he should have a definite purpose or aim that guides him throughout. Concerning the value of such a purpose and its influence upon a pupil's high school work

A boy of 17 writes: "I believe most girls and boys drop out of high school because they have no particular aim. Take for example two boys, one who has no definite aim, the other who definitely intends doing a certain thing. The first boy studies because he has to or because he has nothing else to do. To him it would mean little to drop out of school. The second boy studies for some definite purpose, to obtain something. For him it would be a calamity to have to leave school." A girl of 18 writes: "Many pupils on leaving grammar school, are encouraged to go to high school for no particular reason, except to continue their education as a matter of course because 'everybody' does. As a result many go to high school with no definite plans and with the intention of making the most of it by having a good time regardless of lessons. Such pupils," she continues, "high school could well dispense with unless by constant persuasion of teachers and friends they can be made to take an interest in their work with some aim in view."

Lack of ability was not considered an important cause by the pupils. The feeling is almost universal that those who enter the high school can and should go on. The following quotation is a typical expression on this point.

"Why do so many boys and girls drop out of school? you ask us. Well, if you should inquire deep into their hearts you would find that the real reason is because they cannot or will not do what is required of them. Now under the first class we place those who have to help support their parents, those who are too ill the greater part of the year to attend school and those who are kept at home on account of illness of some member of the family. Under the second class we place those who have not the desire to learn. But in neither of these two classes have we, as is seldom the case, found a downright stupid person, one who could not learn if he had the desire."

Dislike for study. Under this head were grouped all those who were said to have dropped out of school because they naturally disliked study and school. Two distinct classes were described. First, those who would rather smoke cigarettes and lead the life of a typical bad boy or tramp, mentioned by only three. Second, those who had no interest for study or books, who "longed for more activity and life," who "were anxious to see what they could do," who "wanted to bring things to pass." A few of this class were described as caring more for

frolic and fun than for anything else. Other pupils were said to drop out because they were too timid or over sensitive. The thoughtless, exacting teacher, devoid of that sympathy which all pupils crave, is sure to drive all such pupils out of school either through sheer discouragement or by producing a nervous fear which undermines the health of the pupil to such an extent that she is compelled to drop out. Some drop out because "they feel they are too big or too old to be in school." "They are embarrassed on account of their size or age." "Others begin to think they are already men and since school is not the place for a man they naturally drop out."

A girl of 15 writes: "I have heard it said that when a boy goes to work he thinks he is more of a man. I think some of the boys leaving school get this idea into their heads." Another said: "Some boys feel bigger and more manly when they are working so they leave school to go to work."

THE SCHOOL GROUP.

The third group of causes has to do more especially with the work of the school. Discouragement, Loss of interest, Disappointment with the school, Dislike for certain teachers or studies, Thinking the work of the school not worth their while are the most important causes of this group. According to the papers these causes affect more pupils than all the other causes combined. If to the number leaving from the causes of this group, some one of which practically every student names, we add all those who drop out because their health has been impaired by the strenuous unnatural work of the school, all those who want to go to work because they are disappointed with the school, all those who go to other schools, all those who don't like to go to school because they are not getting what they like or need, all those whose lack of ambition might be stimulated by the school, we get some idea of how inadequately the high school of to-day is meeting the real present day needs of the boys and girls. The one point upon which all the papers agree is that the vast majority of pupils leave school either because they are not interested, because they are discouraged, because they are not properly encouraged and helped by their teachers, or because they think going to high school don't pay.

Discouragement. Serious discouragement, from whatever cause, is sure to drive its victims out of school.

A boy of 17 writes: "I think more pupils leave school because they are discouraged than is generally known. Take a young fellow in his first or second year at school. He is comparatively inexperienced as yet. Suppose he gets one or two 'D's' in his first term and perhaps a repetition of this the next. His strongest inclination is to throw down his books and say: 'Hang the stuff! I can't do it to save my neck! I can't, and I never can do it so there's no use trying.' He so

convincingly persuades himself that he cannot do it that he ceases to try. His teacher fails to understand or encourage him and gives him a third 'D,' when he feels that he was not made for school and that school was not meant for him, and leaves. I had personal experience with one of my chums and feel qualified to speak." A girl of 17 says: "As far as I can learn, the chief reason for boys dropping out of school is discouragement. The greatest number leave soon after they enter upon a new year's work. They come back to school in the fall to take up new studies under new teachers. They fail perhaps in the first or second recitation and get discouraged. There is no mutual understanding between them and the teacher. The teacher shows no sympathy and gives no encouragement and help, so these pupils conclude they can't master the study and quit."

How Discouraged. Pupils are said to become discouraged in many ways, but bad marks, low grades, repeated failure in part or all of their work is given as the one great cause.

A boy of 17 writes: "Low marks is the greatest cause of boys leaving school. When a boy gets low marks he begins to get lazy and discouraged and does not try to make up his lost work." According to the pupils nothing is so discouraging as to get low grades or poor marks when doing one's best. A boy writes: "I know by personal experience that there is no greater discouragement in school-life than to know that you are behind the majority of the members of your class. The temptation to drop out is a hard one to resist." Another boy said: "If he does fail his first thought is, 'I am going to quit.' The failure causes him to detest his books." "Boys and girls usually leave high school," said a third, "after they have failed in some study. They become disheartened and think they owe the school or some teacher a grudge, so leave."

The reasons for the low grades and failures which cause the discouragement are fully described. Some fall behind because they are not interested and do not apply themselves as they should. They are over fond of sport; they want to have a good time are a little lazy, perhaps, and so fail to do the work. More seem to try but find the work too hard, the lessons too long, or some required study especially difficult and troublesome. If the teacher fails to understand or help them they are sure to become discouraged and leave school. The causes of failure may be described in their own words.

"They don't know how to study;" "Are careless in their work;" "Have more work than they can do;" "Don't select the right course;" "Don't study at first and so get behind;" "Are not well prepared for the work;" "Are compelled to miss a few days and get behind;" "Are not helped enough;" "Teachers don't make the subject clear;" "Some are slow at grasping explanations and timid about asking for help;" "Teachers take no interest in them;" "Are left to get what they can;" "Are discouraged by 'D' warnings when doing their best;" "Is nothing in the school to appeal to the interest of a boy," and the like expressions are most often used. One girl said: "Because they don't knuckle down to hard work pupils get behind. At the end of the year when they are told they must take the work over again they become discouraged and leave."

But while the above causes were often mentioned and vividly

described nothing comes out so clearly in the papers as the general belief among the pupils that the teachers have more to do with a student's failure and success than do all the other factors of the school combined. Bad marks and low grades they make the chief causes of discouragement. Unsympathetic teachers cause the failure and loss of interest which brings it about. Many thought "all dropping out of school would stop if teachers would only take more interest in their pupils and help and encourage them as they should."

As a boy of 17 states it: "Failure cannot always be assigned to poor scholarship. Often the teacher has not that knowledge of human nature necessary to an instructor or does not take a sufficient interest in the individual pupil to encourage him and make him succeed." A girl of 18 writes: "I believe most boys and girls leave school because they fail to excite the sympathy and co-operation of their teachers. The fault is not, to my mind, entirely the pupil's, for some teachers who have been going over the same subject, with its explanation usually worded the same way, cannot understand why one green to the subject should not understand it fully as well as their experience enables them to do. When asked for an explanation they sometimes say: 'Oh! I don't think I can make it any clearer unless,' then go on and give it just as it is in the book. For this and similar reasons most boys and girls look upon their lessons as invincible bores and are glad to seize any favorable opportunity to shirk them."

Another boy, after describing a certain unsympathetic teacher and giving his experience at length with him, said: "Before I had this teacher I could not see why pupils dropped out of school but now I realize how a pupil comes to drop out of school for no reason apparent to outsiders but for one certainly good enough for himself."

The other causes for discouragement mentioned were: "They think their teacher is down on them;" "Other pupils get the work with less effort than they;" "They fail when trying hard;" "They get started on the wrong course;" "They are not understood;" "The strain of home duties and school work is more than they can bear;" "They were compelled to miss a few days and got behind." Sometimes the pupil is easily discouraged, is over sensitive, afraid to ask questions, can't recite, is easily embarrassed and the like. Such pupils rarely get due credit for a recitation and are often disheartened and driven from school because the teacher fails to understand.

Loss of Interest. Ninety boys and 217 girls mentioned lack or loss of interest and disappointment with the school as a cause for pupils dropping out. But the causes of this disappointment and loss of interest were not so fully and definitely described.

Most of them simply said that "pupils are not interested in school," that "they get tired of it," "don't enjoy it; that it becomes disagreeable, monotonous and tiresome to them;" that "there is nothing doing in school;" that "they would rather do other things;" that "the subjects are not to their tastes;" that "they get tired of studying;" that they don't get into the spirit of the work;" that "they fail to catch the spirit of the school," and therefore lose interest and drop out. A girl of 15 said: "Many pupils are not interested in the studies they take. The parents are consulted but the pupil's wishes are ignored. If the studies selected prove a disagreeable task instead of a pleasure the boy drops out of school at the first opportunity." A girl of 17 puts

it thus: "Boys and girls leave school usually because of the monotonous round, if I may call it so, of the studies which are often very distasteful to them, and because of the too close application required. I have heard any number of girls say: 'I'm sick of school, I think I'll leave.' The only reason they had for leaving it was that there was not enough pleasure in it." The school don't seem to be adapted to the pupil's individual needs. Other things are more attractive and interesting than the school. One girl said: "Many cannot give their decision in favor of school when pleasure and ease are the other happy alternatives. When weighed in the balance school is the more often found to be wanting." Another said: "The pleasures of life have a far greater and more alluring charm for the student's wistful eye than is generally supposed."

Scores of papers describe the necessity of having one's interest in school aroused. A girl of 18 writes: "I think the reason so many girls and boys drop out of school is because their interest has not been aroused; they have not discovered the value of their studies, but have looked upon them as a bore. Often, especially during my first years in high school, have I been on the point of leaving school, just because I found everything a bore, just because I took no interest. Teachers had no patience with my failings, and reprimanded me when a kind encouraging word would have 'worked wonders.'"

Nothing was so fully discussed by so many pupils as the teacher's influence in arousing and maintaining a pupil's interest in his work. The following quotation is a typical one. A boy of 17, after mentioning the subjects which specially interested him in school, said: "I attribute much of the interest I have taken in any subject to the teacher of that branch. I entered a class last year which was taught by a teacher who was always finding fault and grumbling. She made the life of a pupil miserable from the time he entered her class until he left it and miserable the rest of the day in anticipating the entering of her room on the following day. The first part of last school year I was not feeling very well and had considerable work, but I think I could have borne it all if it had not been for that everlasting grumbling and the depressing influence of this particular teacher's room. At Thanksgiving, although I had passed well enough in that subject, I decided to drop it. At the end of the first semester, as I was feeling better, and thinking that it would be cowardly to quit a subject forever which I had so nearly conquered, and desiring to graduate from the school I took up the subject again. When I entered the class at the beginning of the second half of last year there were only six boys and about twice as many girls left in the class. By the beginning of this year the girls had diminished one half and I was the only boy left in the class. But our new teacher was the very opposite of the one above described. She was sympathetic, pleasant and helpful. She never grumbled but made from a hard tedious subject a study which we all liked. We no longer dreaded entering the class, for our interest made the lesson easy. The teacher described first has been the cause of more pupils leaving school discouraged than anything else I know of. Yet I do not think she is much to blame for her nature is that way. She thinks she is doing good and probably is to some, but I think she has only been mistaken in her selection of a profession."

Some had already lost their interest in school when they reached the high school and failing to get it revived they soon drop out. "They never intended to finish the course;" "They started for fun and only go to have a good time;" "They come only a year or two just for the name;" "They enter in glee, stay long enough to be termed

'Freshmen' and then one by one drop out;" "They just come to see what it is like; when they have found out they leave," are the ways in which this class of pupils is described. In the words of a girl of 18: "They enter school without any purpose except to have a good time and because it sounds well to say you have been to high school. Not expecting to go to college and not being interested in their work they find other interests than their studies in the school and drop behind in their work ending the term with a 'flunk' mark upon their report. About this time the parents begin to murmur and tell their children they could be doing more good at home than in school if they cannot keep up in their studies. Then the pupil becomes reckless at school. They study when they feel like it and fail in recitation without caring a bit. The result is that they get so far behind their class that they retire from school." Other cases were described where pupils were disappointed with the school. "They found it didn't meet their needs;" "They wanted electives but had to take a prescribed course;" "They were compelled to take some study they very much disliked so were disappointed and quit."

Wanted to go to work. From the descriptions of this cause it is clear that pupils in the majority of cases wanted to go to work because they had become discouraged or because the school had failed to interest them and meet their needs.

Twenty-one boys and 59 girls in so many words said that pupils quit school because they did not like to go. "They don't like to study;" "Want to get at more congenial work;" "Would rather have a good time;" "Think other things are better than going to school," and the like reasons were most often assigned for this dislike. No case of lack of ability or natural dislike for school was included in this group.

Dislike for Teachers. Ninety-seven of the pupils said that dislike for some teacher or teachers made pupils quit school. The causes for this dislike may be described in their own words.

"They were scolded because they got behind;" "They were not encouraged and helped at the proper time;" "They got the idea that the teacher had a pick at them;" "They were not understood;" "The teacher made it unpleasant and disagreeable for them;" "He gave too long lessons and used remarks which ought not be allowed;" "They were so sarcastic and hard on the class that all sensitive pupils dropped out;" "The teacher was too impatient, unfeeling, cold and reserved." A boy of seventeen said: "Some teachers don't try to help a dull boy over the hard places at all but make it harder for him by being sarcastic when he makes a mistake." Another, B. 18. "If teachers would be more jovial, I think many more pupils would stay in school. Many a boy has lost his education because of some old cranky teacher who does not understand him and directly or indirectly drives him from school." Another: "Sometimes when a boy is just at the age when he wonders whether it does any good to go to school or not an unsympathetic teacher causes him to drop out." The following quotation shows what pupils think often occurs. A girl of 16 writes: "Some leave school because they have had trouble with some one teacher who had so influenced all the other teachers that it is most unpleasant to stay in school." Others say: "Many a boy stops school rather than be tormented by a teacher who fails to understand him." One boy said: "In the grammar school the teachers are younger and some way seem to be able to 'get at' the pupil's peculiarities. When

they come to the high school some of the teachers do not seem to be able to consider that they feel strange and lost in the beginning but keep telling them they are not doing as well as their other classes did which so discourages them that they cannot do the work."

It is a well known fact that with the increase of experience and age our feelings are unconsciously blunted and dulled in spite of any effort we may put forth to hinder it. This being the case one of the hardest things for a teacher to do is to keep in mind how things once appeared to her; to realize how keenly pupils feel and how deeply they are affected by things which would be hardly noticed by an adult. The failure of the teacher to realize and remember this fact drives many pupils out of school. The following quotation is a typical description of this point. After discussing a number of things which cause pupils to withdraw from school one girl said: "A great many times teachers are the cause of it. Of course we hear, 'Well, the pupil did not amount to much or he would have remained in school no matter what came up,' but people do not stop to think that boys and girls going to high school are just at the age to get provoked and do things that they regret. They are not men and women even though they are supposed to be. All teachers were once pupils at school and should remember how one little thing would hurt their feelings."

A boy of 18 writes: "I have often thought that unsympathetic teachers were to blame for pupils leaving school. Their teachers do not understand them, and they realizing this and thinking that they cannot learn under the circumstances, drop out of school. I do not say that this is always the case, but it does happen and often without either teacher or pupil realizing the cause." Another said: "I think the reason so many pupils get discouraged and quit school is because teachers do not interest themselves enough in the pupils and do not make them feel like some one cared for them. I know of several cases in one school where pupils have dropped out on this account." A girl said: "When a pupil does not get along well at school to spite the teacher they often quit."

Don't think it Pays. Ninety-two said pupils left school because, as one boy expressed it, "they do not appreciate its benefits."

As the girls express it: "Boys can see the value of earning fifty cents, but completing the high school course don't seem to them to be worth the time and effort it takes." "They think that it does not pay," "that it is useless to go," "that it won't do them any good," "that they will never be able to use the knowledge gained," "that the course is not practical enough," "that certain studies are no good," "that they can't learn anything worth while at school," "that it is a waste of time when they might be learning a trade or doing something of more account to themselves." "A few think if some of the most successful men in the world got along with little education why can't they?" As one girl said: "A great many boys and girls get the idea into their heads that study and school is mere 'bosh.' They must leave to work, get money, and make some headway in life."

The boys make even more of this cause than do the girls. They ask: Does going to high school pay? Does it pay me? If they decide that it don't pay they are sure to lose interest and drop out. One boy, after describing the many difficulties which boys meet in school said: "But all difficulties could be overcome and all dropping out of school would stop if only the pupils appreciated the good which those four years of schooling would do them." More of the papers than the table shows described cases where pupils had left school because they "thought

the high school a waste of time, because they thought it did not do them any good," because "they thought other things more important than school," because "they thought it useless to go or that it did not pay." The four years seem very long to the boys. Failure in their work, low grades, distasteful studies, too much work, any aimless or uninteresting task is sure to make them ask: Does it pay? The alluring things outside of school seem more important to them and induce them to drop out when the first discouragement comes. It is usually described thus: "Boys leave school because of a general discontent. They are dissatisfied with their studies and the school. Inviting jobs are plentiful. They reason that a bird in the hand is worth two in the bush, so when a job presents itself with good wages and a chance for promotion they jump at the opportunity only to be sorry afterwards when they find out what they have missed. But they are too proud to come back." Another boy of 16 writes: "A great many boys think the last two years of high school do them no good if they expect to work after they leave. So instead of wasting their time they leave because they think they might be doing much more good at something else."

Overwork. Many complained that the work was too hard. 42 girls said overwork and too much home study made pupils leave school. "They have too many lessons to get;" "If they get behind they can never catch up;" "The home lessons are too hard and long;" "Girls don't like to study in the evening;" "A girl ought to have some time for herself," and the like expressions are used in describing this cause. The boys did not mention this cause but practically every paper received in some way condemns the present crowding and rush of the school. It is described as unnatural, distasteful and often as an unbearable bore. The vast majority seem to think that little or no work outside of school hours ought to be required.

The following quotation is a representative one.

"I realize," said a girl of 17, "that the standard of a school should not be lowered, yet many drop out of school because of the large amount of studying required. Each pupil, whether bright, average or slow, if taking a straight course has four daily lessons requiring from one to two hours home study making from four to eight hours of study after the five hours of school work. Subtracting this time from the allotted time of day how much is left for sleeping, eating and recreation. As a general rule the pupil neglects recreation and sleep, which undermines his health. Others take time for recreation and fail in their studies, in either case the result is dropping out of school."

MISCELLANEOUS GROUP.

In addition to the causes already named and described a few said: "Pupils are sometimes discouraged before they enter high school by those already in the school telling them how hard the work is." Others were said to be influenced by associates who thought the high school no good, or had chums who cared nothing for school. Still others were not properly prepared so failed, became discouraged and dropped out. Some entered when too young to appreciate or understand the work.

"Pupils are crowded into the high school," said a boy, "long before they ought to be. It is impossible for them to carry work meant for older pupils." Others, again, thought they were too old for school; it looked little and babyish to them. A few had summer jobs which they did not want to give up in the fall. Still others described too many parties and too much dancing as a cause. "They are too fond of pleasure to keep up in their work and too proud to drop out." Some were said to be too much interested in athletics to do their school work. A New England boy thought the girls were mostly to blame for the boys dropping out. He said: "Although the girls do not leave school in such great numbers as the boys in many cases they are the cause of it. One does not hear of so many boys leaving school if they go to a school where no girls are allowed to attend. In general they drop out of those schools where both sexes are." Still others said that failure in some particular study they disliked and were compelled to take caused pupils to become so discouraged that they quit school.

SUMMARY.

Summarizing the foregoing facts we find that many exaggerated and misleading statements have been made in regard to the number of pupils that drop out of school. But making allowance for all corrections and setting the facts in their most favorable light it still appears that more than half of those who ought to complete a high school course never enter a secondary school; that of those who enter only about 20 per cent. remain to complete the course; that these graduates are mostly girls, the statistics showing that most girls who enter high school remain to complete the course while four-fifths of the boys drop out, giving us the curious anomaly of schools planned almost exclusively for the boys and attended chiefly by the girls. As regards the significance of this excessive loss much speculation has been indulged in by teachers, principals, and prominent school men, and many causes suggested and remedies set forth. These opinions have a certain value because of the knowledge and experience of the writers but they do not give us the real reasons for pupils leaving school. To ascertain truly why so many boys leave we should go to all those who have actually dropped out and learn from them why they left. But this is practically impossible, so we must do the next best thing, get the opinions of their classmates and chums. From their description of the causes it appears

1. That there are many causes (varying somewhat in different communities) for pupils leaving school, any one of which may singly or working together with one or more other causes influence a pupil to withdraw from school.

2. That these causes naturally fall into three groups.

(a) Certain attractions or influences without the school, commercial aspirations, desire to get money, poverty, lack of encouragement at home and the like, mentioned by 807.

(b) Individual peculiarities and various adolescent traits, laziness, desire for activity and the like, mentioned by 616.

(c) Certain causes due to the shortcomings or defects of the school, mentioned by 923.

3. That 70.5 per cent. of the causes named are remedial and should be removed by the school. The causes over which the school has little or no control, such as demand for boy labor, ill-health, being compelled to help support themselves or family, lack of ability, bad character, natural lack of interest or dislike for school were mentioned only 720 times in all the papers, while remedial causes were mentioned 1,724 times.

Natural lack of interest or inherent dislike for school work, bad character, lack of ability were mentioned only a few times. The magnetic power of a tempting position awaiting the boys was vividly described and may be considered as wholly or partly beyond the power of the school to counteract. Ill-health mentioned by 145 girls was often attributed to the lack of exercise, to overwork or worry caused by the work of the school. Being compelled by necessity to go to work was mentioned more than any other one cause, but practically all who mentioned this cause stated that the majority dropped out for other reasons which they then go on to describe. In almost every paper some one of the following remedial causes received the emphasis—Discouragement, Loss of interest, Lack of ambition, perseverance or grit, Laziness, Desire to get money, Desire to get started in life, Dislike for certain teachers, Lack of encouragement at home or at school, Failure to see the value of going to school, Thinking it would not pay and the like.

From the opinions of the 961 high school students who discuss these causes the following conclusions may be drawn:

1. Few pupils are compelled to leave school. Poverty, the cause most often mentioned, is a general but not a very important cause. The important causes are the remedial ones.

2. Indifference or loss of interest and discouragement are the two most important causes described.

The vast majority of pupils leave school either because they are discouraged or because things outside of school are more attractive and interesting to them than the work of the school. As a girl of eighteen stated it: "I used to wonder how pupils could leave school but I see the reason now. Outside interests are stronger than the interests of school." Scores of papers describe what these outside attractions are and how strongly they appeal to the boys and girls. The desire to get and make

money is strong among the boys. They want to be independent. Many want to get started in a business or trade and are almost irresistibly drawn towards a tempting job. They are attracted by outside influences in various ways. One boy of 17, whose paper as a whole clearly showed that he was not writing for poetic effect, after describing at length various things which influence boys to withdraw from school said: "Then when the springtime comes, when the sunshine on the earth makes every steaming hill bud into green, when the dark pines and firs in the deep canyons beckon and tug at the heart of the boy, then is the time to act; then is the time the pupils leave school drawn by an unknown call; then is the time to put interest into the school if our coming men and women are to be held for their high school education." But not only are there strong attractions outside the school which draw the pupils towards them but the school itself is repelling. The subject matter and discipline of the school, as administered, don't seem to meet the pupils inner and outer needs as well as do other things. As one boy expressed it: "The scope of the work is too narrow and does not offer the proper facilities and conditions for the general mass of students. Students with a natural aptitude for theoretical mathematics, those especially literary inclined, the lovers of the languages, the indigenous book-worms—all make rapid progress for the reason that the high school meets their natural needs. When, however, the practical, physically active student is put side by side with those of the above class and the same kind of work expected from him, the result is not satisfactory. The latter falls behind, school seems a bore, and he leaves to seek conditions more conducive to his natural inclinations. He wants to produce something with his hands rather than theorize." Then, too, parents often fail to encourage their children as they should. That pupils need encouragement and sympathy at home as well as at school the following sentences indicate: "But for the encouragement of my parents," wrote several boys, "I would have left school long ago." "If a boy is constantly reminded of the cost of his education," said a girl, "he will quit school to go to work at the first opportunity." Others said: "Some parents don't care what their children are doing, therefore they lose interest and drop out of school." It is these conditions within and without the school, together with the general spirit of the times which places so low an estimate on the worth of school, which makes the boys think that getting an education is not very important after all. They soon become saturated with the idea that going to school is n't worth their while, that it does n't pay. As so many express it: "Because their interest has not been aroused, because they

have not discovered the value of their studies, but have looked upon them as a bore they drop out." A significant fact is that every boy throughout his high school course frequently asks himself whether or not his going to high school is going to pay him. They think about it more than we suspect, as the following typical sentence illustrates. "A subject to which I have given much thought," wrote a boy, "is, does going to high school pay?" The seniors or those who have been in the high school several years and have caught the spirit of the work think that it does, but few boys in the first and second years appreciate the opportunities which the school affords. The result is they become indifferent, lose interest and drop out. Some see the advantages of going to school and try hard to succeed, but because they are over sensitive and are misunderstood, because they are not properly encouraged and helped they fail in their work, become discouraged and leave.

3. Better teachers is the remedy which the pupils propose. Teachers who understand each student's needs, who make them see the advantages of going to school, who create a living interest in their work, who always make their instruction clear, who never demand nor expect impossible things, who are always patient, energetic and kind, pleasant and just, who never fail to encourage and help their pupils at the proper time, can, according to the papers, do more than all else to keep the boys and girls in school.

The teachers are not blamed nor held directly responsible for the excessive dropping out which the writers of these papers all so much lament but the students firmly believe that few pupils would drop out of school if all teachers would encourage and help their pupils as they should. The pupils think that all school work should be made pleasant and interesting for them, that they ought not be required to do much work outside of school, that the high school ought to fit them better for the work they are soon to do. Teachers, on the other hand, may naturally say that the pupils and the system are to blame for the discouragement and indifference which takes so many out of school, that it is the pupil's business to be interested in their work, that they ought not to be so indifferent and inert, that they ought not to become discouraged so easily, but should make themselves more independent of their surroundings so that they would be able to overcome any discouragements and difficulties that might arise. But wherever we place the blame whether with pupils, teachers or school, the fact remains that the pupils think the teachers can do more than all else to keep the boys in school. "Many a boy" said one, "has entered high school with no ambition but to finish his four years' course as quickly as possible. But by attending a good school and com-

ing in contact with some real helpful teacher, who made him see the necessity of a good education, he has been fired with the ambition to be some one and to do something, and make the world know he is alive." The papers clearly show that pupils do not have an inherent dislike for school and work as appearances would sometimes lead us to suppose. One cannot read them without being convinced that the indifference towards the school, the lack of interest shown, and much of the so-called laziness described is due to the fact that the pupils do not understand the subjects taught. Everything goes to show that any subject which the pupil understands excites his interest and will be zealously studied. Not a single pupil described a favorite teacher who was lenient or easy in her requirements. On the other hand many described teachers they admired because they made them work. But in every such case these teachers had not forgotten how young people feel and think, and were always ready to help and encourage their pupils by making their work both interesting and clear. All said they did as much or more work for their favorite teacher as they did for all the other teachers combined and that it was always a pleasure to do it. So whatever the cause of the lack of interest and discouragement which causes so many pupils to drop out of school we have here a remedy unconsciously proposed by the pupils which should not be ignored.¹

The time when the teacher's influence is greatest is during the first and second years. Scores of papers go to show that the critical time is the Freshman year. "The most important period of a high school student's career," writes a boy, "is his Freshman year. He enters, young, afraid, fresh from the grades, to take up a line of work entirely new to him. He is attracted by the novelty of the thing. Easily is he impressed and has but to be furnished a leader when he will follow in anything. If he goes with a studious chum he will study; if he finds a teacher to lead him he will follow; if he joins a 'gang' he will do anything for notoriety except study." Then after speaking of the opportunity the teacher has to help and make something out of such a boy at such a time he says: "The teacher must impress the Freshman with the vast importance of the position he occupies; he must give him a clear, solid perception of what high school is for and make him understand that on his first two years depends his success." Scores of papers describe mistakes that are made at this time. The following quotation throws light on what may be the working of an elective course. After describing the shock which

¹Just what the pupils think the ideal teacher ought to be and do will be set forth in a future paper.

the change from a grammar to a high school produces upon a pupil's mind a girl said: "It is all so strange and new that the pupil finds it hard to select the studies which he wishes to take. Then it is that many mistakes are made. The pupil, urged on by some older person, selects studies which are entirely foreign to his nature and interests. Later he must change his course, substitute and so mix himself up, that it takes the remainder of his school life to straighten things out. By the time the long worked for diploma is placed in his hand he has just found out what would have interested him most. But it is too late, his school days are over. He will probably take up his life work in the same way that he did his studies at school," she adds, "finding out when it is too late how much better he might have succeeded in other things."

A significant criticism of the high school unconsciously made comes out in the intense yearning for more freedom, more enjoyment, more activity and play, which was so variously yet emphatically expressed in every paper received. The more loyal the pupils are to the school, it seems, the more do they withdraw from the natural and wholesome sports of childhood and youth. A composition "On Sports," by a girl, illustrates this criticism so well that I give her argument in full. She began by a description of how much girls enjoy some favorite sport. "But," she said, "with four home lessons to get, every girl must abandon her sports if she wishes to succeed at school." Then the actual conflict between the desire for activity and play and the desire to succeed well at school was vividly described, ending with the conclusion that unless one wishes to get low grades at school she must abandon all sports. The description of how she passed the Public Gardens each day for weeks and saw her friends skating while she had to return home to study her lesson was pathetic to say the least. "Sometimes," she concluded, "I felt as if I did not care whether I received a high grade in all my studies or not as long as I had the pleasure of skating. But this feeling did not remain long, for although one derives some benefit from skating I think we derive still more from studying our lessons." The same thought is often expressed in the returns. "I think," said a boy, "our high school life would be much more agreeable if there could be less home study and more study at school. As it is, school life is drudgery to all those pupils who do not love to spend hours and hours in study. For, from Monday morning to Friday night there is not a minute's rest from school work. If you spend a few moments in recreation your conscience troubles you for you keep thinking all the time, 'I ought to be writing that composition or translating that German.'"

Another said: "No one knows but those who have been through

it, the work and worry a sincere student has in daily keeping his grade at a high standard." Thus the more loyal and conscientious students feel towards the school. Those less conscientious and loyal follow their natural instincts and interests and drop out.

It is, of course, impossible to adequately express in so few words what a thousand students have described at so great a length. To take the passages out of the context as I have done and treat the different points separately destroys much of the spirit and force of what the pupils say. No number of individual quotations and no statistics of the returns can be made to convey to the reader's mind the spirit of the papers as a whole. More is often added by the setting than by what is actually said.

Perhaps the most significant thing is the keen interest, the absolute sincerity, the eagerness and fullness with which the points were discussed. It was as if the writers had been waiting for years to unburden their minds of certain things which they had never been given an opportunity to express. But while the writers of these papers showed by their enthusiastic descriptions of the benefits which they had derived from the school and by the unmistakable spirit of loyalty which their papers showed, that they were much interested in the high school,—it is also true that they all, most forcibly declare that the pupils in the first years of the high school think less favorably about the school. The seniors almost without exception feel towards the school like the girl who said: "With all the criticism, remarks, improvements and suggestions I have to make, I cannot think of the high school but as a dear, old familiar place, a place next to home, where I can come and feel that it welcomes me." But the pupils who have just entered, or who have been there but a short time, those dropping out, feel very differently. To most of them the school is a bore, a place for "babies and girls," something dull, uninteresting, monotonous and hard. "If you want to do something really worth while you must get out of school as quickly as possible," is their thought. They are saturated with the commercial spirit of the times; they are prone to measure the school by cheap, practical, and utilitarian standards which make it shrink into almost insignificance; they have caught the spirit of our times which places too low an estimate on the work of the teacher and the school; they are looking at everything from the standpoint of the practically minded matter-of-fact adult just when they should be inspired by ideal things.

If the reasons for pupils leaving school, described by these nine hundred and sixty-one students, could be stated in a word it would be something like this. On the one side is the modern,

strenuous, unattractive, college-serving high school. Over against it are arrayed the alluring attractions and pressing interests of the world. In this country the boys are largely left to take their choice between the two. There are no special privileges or commanding parents to urge them on to complete the high school course, as is the case in Germany and France. Many never enter the high school at all. Others enter but are disappointed with what they find. There is nothing in the school that deeply interests them. They fail to catch the spirit of the work. They may lack proper encouragement at home. They are often misunderstood. The school seems dull, monotonous and slow; not very important after all. It gives them what they do not want; outside influences continually attract them. Hence they leave.

In this initial report on material collected from many schools I wish to acknowledge my indebtedness to Dr. W. H. Burnham for suggesting this investigation and for helpful suggestions and criticism and to Pres. Hall for his interest and assistance in the work; also to Mr. Wilson and his library assistants for their constant courtesy and helpfulness. Especially do I wish to thank those High School Principals and Teachers of English who so promptly and willingly obtained the compositions upon which this study is based. Without their special interest and co-operation the investigation could not have been made. The writer hopes that this presentation of the pupils' point of view may at least in some small way help them and their colleagues in the perplexing daily problems which they continually meet in their schools.

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LITERATURE.

WILHELM AMENT. "Fortschritte der Kinderseelenkunde, 1895-1903." Archiv. f. d. Gesamte psychologie. March, 1904. Referate p. 69-136.

In this very compact article we have a fairly comprehensive overview and classification of the most important contributions to child study from 1895 to 1903. The work in the main is non-critical, aiming chiefly to show by appropriate classification what has been accomplished toward a system of child psychology.

German contributions receive the bulk of the attention; not, as the author says, because he is a German, but because "Germany is once more the centre for the development of child psychology,"—"Im Ausland liegt nur der Schwerpunkt der Masse." The author mentions, however, the period of German apathy toward child psychology which followed upon the early work of Preyer. He attributes this apathy to two causes: 1st, the fact that psychologists were just then busy developing the new experimental methods; 2nd, to the pedagogical turmoil over the speculations of Herbart.

During this time the work in America, France, England, Italy and Russia exceeded in value that of Germany. But 1895 marked a turning point, since which time foreign work has surpassed that of Germany only in quantity.

The *system of child psychology* is set forth under the headings of *Will, sense-perception, the affective processes, Association and Reproduction thought, Vorstellungskreis, Consciousness and Mental Work.*

I. VOLITIONAL ACTIVITY. Little work done in the general field since that of Preyer, Pérez, and Tracy. The expressive movements, however, have received more attention, *e. g.* :

1. *Writing.* Sources of mistakes, types of hand-writing.
2. *Drawing.* Stages according to Sully, Lukens and Ament. Objects preferred by children. Application to the teaching of history.
3. *Singing and music.* Earliest manifestations.
4. *Speech.* This being the author's own field of work naturally receives a large share of attention. Two chief things are discussed: 1st, the part of imitation and invention in speech formation, and 2nd, the biogenetic law in speech development. In regard to the former point the author's view is a kind of compromise between the extreme tendencies. The child is original, does invent in forming his language but does so impulsively and instinctively, not intentionally. The child is the author of *Ammensprache* but the mother and nurse give it content and continued existence. As regards the so-called biogenetic law, the author concedes the claim of Wundt; namely, that the parallelism is due simply to the similarly undeveloped consciousness to be found in the child and in primitive man. He nevertheless insists on retaining the term, "biogenetic law." The reviewer wonders at this strange satisfaction with a term thus robbed of its content. Such an acknowledgment seems to render meaningless the author's well known claim that the ontogenetic development of speech is simply an abridgment of the phylogenetic.

II. SENSE-PERCEPTION. Here are discussed the methods of testing color-perception, observations on the Müller-Lyer illusions, and the localization of sensations.

III. THE AFFECTIVE PROCESSES. The literature of this division embraces the bodily expressions of emotion, temperaments, the æsthetic feelings, emotional response to nature, religion, love and fear.

IV. ASSOCIATION AND REPRODUCTION. Types of memory, development of memory, ways of committing to memory, effects of fatigue, race, sex, etc.

V. THOUGHT.

1. Line between instinct and intelligence.

2. Origin of thought As to whether stress should be placed on spontaneity or environment.

3. Types of thought.

4. Relation of muscular and thought development.

VI. THE IDEATIONAL CONTENT (*Vorstellungskreis*). This term refers to the child's total outlook, his mental content as to such general subjects as the world, sky, plants, man, family, religion, God, ideals, beauty, etc. The author takes up the *general* work under the headings of development, extent, types, relation to vocabulary, and methods of determining. The *special* works mentioned are those relating to the number concept and its development, the theories of play, the development of the social consciousness, the child as artist, ethical development and the origin of the moral consciousness, religious ideas and child's ideals.

VII. CONSCIOUSNESS. The literature is presented under the headings of self-consciousness, attention, distraction, apperception and suggestion.

VIII. MENTAL WORK. Contributions are mentioned relating to types of workers, mental fatigue, and means of measuring latter.

The author adds a second part to his review, relating to the study of the child mind in tots. He divides the literature into the following classes:

1. That relating to the *origin of the child mind* and its stages of development.

2. *Types of child mind*—and causes of these types.

3. *Relation in the development of mind and body.*

Under the head of Logic of Child Study are discussed its *limits* (*Arbeitsgebiet*), *methods*, *manner of exposition*, and *conception*. The author values all the methods so far employed except the questionnaire method, of which he speaks disparagingly in several places.

For so elaborate an outline, the work is far too brief. No adequate conception is given of the extent and value, either absolute or relative, of any contribution mentioned. A large amount of valuable work done in America is neglected altogether, due apparently to the author's contempt for the questionnaire method.

If any criticism is due the manner of carrying out the outline it is that of being too classificatory and logical. Every method of experimentation and every tendency in interpretation receives a name. The uncritical reader is too likely to imagine well-defined essences behind all of these. The method unduly magnifies slight and often unimportant differences of opinion.

The article is valuable for one who wants a very brief *classificatory* overview of the child study work of the period covered. It is not valuable as an exposition or evaluation of the work.

L. M. TERMAN.

The Confessions of a Physician, by "V. VERESAEFF" (V. Smidovich). Translated from the Russian by Simeon Linden. Grant Richards, London, 1904. pp. 289.

This work has made almost a culture epoch in Russia. Hardly an educated man in that country has failed to read it. Its title is well

chosen. The writer gives a history of his medical education; speaks with the utmost frankness of his mistakes and those of other physicians which have caused the lives of very many patients, of the new medicines which come in insufficiently tested and which, after working their havoc, have been hurled to oblivion; treats every topic of medical ethics; gives the peculiarities of many types and classes of patients; fills his book with scores of instances; and shows himself a man well read in literature as well as experience in his profession. We do not wonder that the medical profession looks aghast at this book, for no one can read it without utter disenchantment, not to say without great increase of scepticism toward the whole profession. The culture value and the pedagogic significance of the book is very great. We cannot help but wish that some clergyman and lawyer somewhere would imitate this frankness.

Die zunehmende Unfähigkeit der Frauen ihre Kinder zu stillen, von G. V. BUNGE. E. Reinhardt, München, 1903. pp. 32.

This distinguished physiological chemist has worked partly by the methods of the laboratory and partly by the questionnaire method based on three thousand answers. The latter leads him to this very important conclusion, which has caused much popular discussion in Germany. Inability to nurse children is in the highest degree hereditary. "If a woman cannot nurse her child, her daughters are with hardly an exception unable to do so, and the power to do so is thus irrevocably lost for all succeeding generations." This inability is increasing rapidly, especially among cultivated classes, and the increase of inability to nurse grows rapidly with successive generations. The chief causes he thinks to be two—tuberculosis and hereditary nervous diseases and psychoses. Next comes the drinking habit in the father. This is especially fatal to this power. It is closely connected with other symptoms of danger, especially inability to withstand diseases of all kinds, where as a result children are insufficiently nourished, and the decadence increases from generation to generation, and leads in the end, after endless suffering, to the extinction of the race. This author holds that the generation of diseased and degenerate children is the "greatest crime men can commit," and he concludes that a normal man who wishes healthy posterity will never marry a young woman who was not nursed by her own mother in the natural way, will avoid girls from tubercular families, daughters of drinkers, and all those with any psychopathic inheritance.

Der Körper des Kindes für Eltern, Erzieher, Ärzte und Künstler, von C. H. STRATZ. F. Enke, Stuttgart, 1904. pp. 250.

This elegant book, with one hundred and eighty-seven cuts, describes the child to the age of full maturity. The chapters on growth and proportions and normal development in general are perhaps the best, but the great merit of the book lies in its illustrations, although it must be admitted that the nudity of many is calculated to give offence to those not well immunized against prudery.

Hygiene der Nerven und des Geistes im gesunden und kranken Zustande, von AUGUST FOREL. E. H. Moritz, Stuttgart. pp. 282.

Few people are more competent to write upon this subject than Professor Forel, who, under this somewhat inadequate title, has given us in general his own views of psychology. In the first chapter he tries to answer the question, "What are soul and spirit?" and answers that they are feeling, will, memory, attention, fancy, reason, language, ethics, etc. He then passes in rapid review the physiology of the nervous system and its genesis. In another section his pathology and the

causes of disturbance are discussed, and only the last part is devoted specifically to the hygiene of the nervous system of psychic life. Here he speaks very plainly on certain delicate topics, is very frank upon the question of marriage, female education, etc., and gives us a glimpse of his own pedagogic ideas.

Führt die Hygiene zur Entartung der Rasse? von MAX GRUBER. E. H. Moritz, Stuttgart, 1903. pp. 35.

This author attempts to meet the charge that special hygienic provisions and attention to regimen are deleterious to the race by keeping alive those unfit to survive. He proves by statistics that this is not the case, because all methods that lead to the extermination of the weakest tend also to the degeneration of those fittest to survive. Neglect of hygiene thus reduces the whole race, the best included, to a lower level than it would otherwise maintain.

Contribution to the Study of the Feeble-Minded in Height and Weight, by A. R. T. WVLIE. Faribault, Minn. pp. 7.

This is a valuable and careful study by an expert in the field. He shows that the average height and weight of the feeble-minded approximates the minimum of the normal. The approximation is closest at the age of about ten, suggesting that while the normal child is pausing for the adolescent outburst of growth the feeble-minded is making up for delayed growth in earlier years. Puberty is delayed with the feeble-minded in such a way that there is often a depression at the age of fifteen. Rapid growth followed by delay or rest seems typical for the feeble-minded. Growth power among them seems deficient and soon exhausted to be made up slowly later. This, too, the author thinks explains the high mean variation in this class.

Physical Education by Muscular Exercise, by LUTHER HALSEY GULICK. P. Blakiston's Son & Co., Philadelphia, 1904. pp. 67.

We have wanted a compend of the views of this very ingenious and suggestive leader in the field of physical education. We cannot help feeling that in this book the author has not done himself full justice. No one who has ever written upon this subject is more suggestive and stimulating or fuller of new and helpful ideas, but in this work he has bound himself down a little too much to practical conditions. But, if anything is lost to those who make these subjects a matter of research, far more is gained to the vastly greater number of those who approach it with predominantly practical interest. There is nothing in English or any other language known to the writer so valuable, comprehensive, and timely as this work. If the author is a little more conservative here than is his wont, this, too, we must accept with satisfaction because his work is thereby sure to be given wider currency than if it abounded in innovations. For the goal the author aims at, no impartial mind can doubt that the book is successful. It ought to be in the hands of every one interested in the subject from whatever point of view.

Our Bodies and How We Live, by ALBERT F. BLAISDELL. Rev. ed. Ginn & Co., Boston, 1904. pp. 352.

This old standard work is perhaps the best of the somewhat too many volumes of its author. It has been too long before the public to merit discussion in this revised edition. Its two hundred cuts are well selected and extremely, perhaps too clear.

Diagnosis From the Eye, by HENRY EDWARD LANE. Kosmos Pub. Co., Chicago, 1904. pp. 156.

This is intended mainly for the physician, although it is also ad-

dressed to the public. We are told little about the physiology and anatomy of the eye but much about its diseases and their treatment.

The Light of Schoolrooms. A manual for school boards, architects, superintendents and teachers. By STEWART H. ROWE. Longmans, Green & Co., 1904. pp. 94.

This is an admirable handbook, well illustrated by thirty-two cuts, many of them full page illustrations. The first section discusses the selection of the site. The second, which is much longer, discusses the architects' plans both in constructing new buildings and in remodeling old ones. The third section describes the teacher's duty in all those respects which pertain to light. Three interesting appendices follow, one giving the mathematical ratio between the height of the source of light and the distance of the farthest seat. The second tells us how to test light both natural and artificial to determine whether or not it is sufficient, and the third tells how to test the eyes of children in ways practicable in every schoolroom. An interesting bibliography is appended and also the various kinds of window material with the names and addresses of their manufacturers.

Grundriss der Heilpädagogik, von THEODOR HELLER. Wilhelm Engelmann, Leipzig, 1904. pp. 366.

After a brief history of therapeutic pedagogy the author passes to a discussion of idiocy, moral degeneracy, epilepsy, chorea, speech defects, cretinism, mongolism, nervous conditions, etc.

Der Stand der Schulhygiene in Deutschland, von H. GRIEZBACH. F. C. W. Vogel, Leipzig, 1904. pp. 59.

This is an admirable summary of the status of school hygiene in Germany with a list of the most important points that hygienists insist upon and of the places where these are exemplified, together with a comprehensive questionnaire.

Premier Congrès d'hygiène scolaire et de pédagogie physiologique organisé par la Ligue des médecins et des familles pour l'hygiène scolaire. Masson et Cie, Paris, 1904. pp. 277.

This volume covers a large field and presents an outline of the reports of all the important papers.

Physical Training for Women (by Japanese Methods), by H. IRVING HANCOCK. G. P. Putnam's Sons, New York, 1904. pp. 152.

Is this the true Japanese system? Of this we need evidence, which this book does not supply. It would rather seem to be a highly Americanized form at least. The next problem is whether it suits women, especially American women. We confess that we are not convinced by either the arguments, the many cuts, or the attractive appearance of the book that this kind of Jiu-Jitsu has much of anything of value for American girls.

Les Exercices physiques et le développement intellectuel, par ANGELO MOSSO. Félix Alcan, Paris, 1904. pp. 294.

Mosso's mind grows more and more practical with advanced years. We have here an admirable treatment of the relation of physical exercise to mental development. He treats of origins of agonistique and gymnastiques, then discusses the problem of physical education in ancient Rome, modern agonistics, the work of government, art, religion, describes physical education in the universities, its relations to democracy, and finally to women. He has made excellent use of his brief American experience.

Grundriss der Heilpädagogik, von THEODOR HELLER. Wilhelm Engelmann, Leipzig, 1904. pp. 366. Preis m. 8.—.

This author, the head of a pedagogic, therapeutic institute, gives first the history of his department, then the definitions and classification complications of idiocy, speech disturbance, of weak minded children, symptoms and cause of idiocy, cretinism and mongolism, therapeutic education and instruction, nervous conditions of children, and methods of caring for those who are defective.

A Treatise on Massage: Its History, Mode of Application and Effects, Indications and Contra-indications, by DOUGLAS GRAHAM. J. B. Lippincott Co., Philadelphia, 1902. pp. 462.

This is really an interesting book, especially the first four chapters on the definitions, history, mode of application and physiological effects of massage.

Die Anschaulichkeit des Geographischen Unterrichtes. Ein Beitrag zur Methodik dieses Gegenstandes, von HANS TRUNK. Carl Graeser & Co., Wien, 1902. pp. 252 + xii.

This book is addressed to teachers, and has now reached its fourth edition. The writer first discusses the object lesson matter such as *Heimatkunde*, excursions, collections, reliefs, pictures, map drawing, the use of maps, the use of mathematical material, cartography in general, the resources in the hands of the teacher of geography, and finally describes the ideal teacher of this subject.

Die Hauptpunkte der Psychologie mit Berücksichtigung der Pädagogik und einiger Verhältnisse des gesellschaftlichen Lebens, von DR. FELSCH. Otto Schulze, Göttingen, 1904. pp. 478.

These lectures are based upon experience, mathematics and metaphysics, and the standpoint is the realism of Herbart. This Felsch maintains against the objections of Wundt and Ziehen and even against some of the Herbartians. Independent investigation and freedom he places higher than a scientific system, and attempts to show that Herbart is not antiquated, unmodern, unchristian, or unpractical, and that his pedagogy does not fit our social era and is a mere shadow or outline.

The Four Epochs of Woman's Life, by ANNA M. GALBRAITH. A Study in Hygiene. W. B. Saunders and Co., Philadelphia, 1903. pp. 244.

The first part in this book treats of maidenhood under the captions, puberty and its hygiene, anatomy and physiology of organs, and menstruation. The second part discusses marriage, its ethics, sexual instincts, sterility, etc. The third part is devoted to maternity, the fourth to menopause.

Wendt's Psychologische Kindergartenpädagogik. B. G. Teubner, Leipzig, 1904. pp. 142.

This veteran educator undertakes to describe the senses, nerves, morals, habits, feelings, etc., of young children. To each a brief section is devoted and the methods of training each of these functions and activities is outlined.

The Secret of Herbart: An Essay on Education and a Reply to Professor James, of Harvard, by F. H. HAYWARD. Swan Sonnenschein and Co., London, 1904. pp. 96.

This book is written partly to controvert Professor James' disparagement of apperception. It is in general a statement of Herbartian views. It is certainly, however, not in advance of even if it is equal to the expositions of American Herbartians.

Beiträge zur Psychologie des Unterrichts, von BERTHOLD OTTO. A. G. Th. Scheffer, 1903. pp. 342.

The author first discusses the naïve as contrasted with the scientific psychology, then takes up successively the function of apperception, the study of psychology, the curriculum in the school of the future, natural instruction, teaching Latin, and gives glimpses into the future.

Zukunftspädagogik, von WILHELM MUNCH. George Reimer, Berlin, 1904. pp. 269.

This is a volume of utopias, ideals and possibilities. The first part contains the ideals or practices of sixteen different writers on education, and the last part discusses these ideals with reference to practice.

The Early Cave-Men, by KATHERINE ELIZABETH DOPP. Rand, McNally & Co., New York, 1904. pp. 183.

We have here the second of the industrial and social history series, with eighty-two text drawings. We must believe that these works are somewhat epoch-making in that they introduce the results of anthropology to young children. Considering the difficulty and novelty of this work, we must place the two volumes that have heretofore appeared very high, although there can be no doubt that they will ere long be transcended by better works.

The Alternate Sex, or the female intellect in man, and the masculine in woman. By CHARLES GODFREY LELAND. Philip Wellby, London, 1904. pp. 134.

This is a very suggestive book. It is stimulating without being satisfactory. It is perhaps a wholesome thing to have now a discussion of the feminine factors in man and *vice versa*, but we must say that had the author been more familiar with the modern studies in this field he might have given us a far better book on this subject.

Gehirn und Seele des Kindes, von M. PROBST. Samml. von Abhand. a. d. Gebiete d. Päd. Psy. u. Physiol. Reuther & Reichard, Berlin, 1904. pp. 148.

This compend discusses the histological peculiarities of the nervous system of the child:—the peripheral nerves, the spinal and cerebral nerves, the cord and cerebrum, the tangential fibers, inhibition, gray matter, etc., and then takes up the physiological peculiarities.

Die Abstammung des Menschen, von BÖLSCHKE. Stuttgart, 1904. pp. 99.

This is a popular little primer of evolution with cuts of the different stages of development in man and of the various animal stages through which he is supposed to have passed.

Aus Welt und Schule, von WILHELM MUNCH. Weidmannsche Buchhandlung, Berlin, 1904. pp. 276.

The best of these thirteen papers are on the psychology of large cities, eloquence in school, nations and persons, psychic reactions, cultured people and the masses.

The Teaching of Scientific Method and other Papers on Education, by HENRY E. ARMSTRONG. Macmillan & Co., Ltd., London, 1903. pp. 476.

The author is a professor of chemistry and has here collected his various essays and addresses on education covering a period of nearly twenty years. Some of the most interesting chapters are on the need of general culture at Oxford and Cambridge, the place of research, the science of education, the workshop in the school, domestic science,

the heuristic method, report on teaching chemistry, juvenile research, conservation of matter, science workshops, etc.

Not in the Curriculum. A book of Friendly Counsel to Students. By Two Recent College Graduates. With an introduction by Henry van Dyke. Fleming H. Revell Co., New York, 1903. pp. 100.

This is a series of nineteen very direct talks to college students on friends, study, athletics, ideals, popularity, use of money, self help, conversation, exercise, relations to the college, practical Christianity, purity, dealing with doubt, drunkenness, profanity, and the Bible in college life. We know nothing better of its kind.

Gesetz betreffend das Dienst Einkommen der Lehrer und Lehrerinnen an den öffentlichen Volksschulen Preussens nebst ministeriellen Ausführungsbestimmungen, von CARL LIEBER. Hermann Beyer & Söhne, Langensalza, 1904. pp. 96.

This pamphlet contains the text of the recent Prussian law (of 1897) for the paying of male and female teachers in the public schools of that country, with some explanation of its working in detail. The last fifty pages are tables showing for every Prussian town of over ten thousand inhabitants the initial salary, the increase with age, the allowance for rent if the teacher does not live in the building. This is shown for teachers of the various grades.

Education; Disciplinary, Civic and Moral. By LLEWELLYN WYNN WILLIAMS. Simpkin, London, 1903. pp. 192.

This little volume is essentially a plea against corporal punishment for inattendance, truancy, insubordination or other grave offences. This was not according to the example of Christ, the ideal educationist, and he scores what he calls the flagellomania of the day and presents to us some very striking instances of inhumanity of English and Scotch schools. He lays much stress on Earl Barnes' study of punishments to children, "the most helpless of animals."

Une âme en prison; histoire de l'éducation d'une aveugle-sourde-muette de naissance. Par LOUIS ARNOULD. 2nd ed. H. Oudin, Paris, 1903. pp. 89.

This "Soul in Prison" is a description of the education of a born blind deaf mute who was educated somewhat as Helen Keller had been, by some devoted woman, in this case Sister St. Margaret, to talk the finger language. The girl, Marie Heurtin by name, born 1885, has by no means attained the proficiency of Helen Keller, neither has Marte Oberecht who is much older and whose training in the same institution had prepared the way for the development of this child. The work closes with a very interesting but concise account of twenty-nine other blind deaf mutes among whom, singularly, Laura Bridgman is not included.

How to Teach a Foreign Language, by OTTO JESPERSEN. Tr. f. Danish original by Sophia Yhlen-Olsen Bertelsen. The Macmillan Co., N. Y., 1904. pp. 194.

This writer has his own method which has been developing for some twenty years. This is amply described here and contrasted favorably with other rival methods. The book is interesting, but seems to mark no special new departure.

Das erste Jahrzehnt des Ev. Diakonievereins. Von DR. FRIEDRICH ZIMMER. Ev. Diakonievereins, Berlin-Behlendorf, 1904. pp. 86.

The Diaconite Association, which here celebrates its tenth anniversary, has proven a beneficent institution for women. It is a school

for nurses, an independent sisterhood with its own training school, and provides places for graduates' insurance, and has developed a scheme of organization, a home for girls and a so-called Comenius seminary.

Notebook to Accompany Bergen's Text books of Botany, by JOSEPH Y. BERGEN. Ginn & Co., Boston, 1904. pp. 144.

This notebook does not entirely consist of blank pages, but there are many pages of general directions for studying plants, mounting them, or making their determinations, which the text book requires.

Practical Morals: A Treatise on Universal Education, by JOHN K. INGRAM. A. & C. Black, London, 1904. pp. 167.

The year before his death, in 1857, before he had arrived at the age of sixty, Auguste Comte drew up a plan of a treatise on theoretical and practical morals which he never wrote. Dr. Ingram here attempts, on the basis of a general knowledge of Comte's writings, to finish this task which his master left incomplete. Life is divided into several periods. Infancy, including the first seven years, leads up in the positivist system to a sacrament of presentation which, like the other eight, constitute landmarks of the positivist life. All are celebrated by the priesthood in ways designed to keep alive in the mind and heart the subordination of personal to collective life and to impress still more strongly the importance of these great turning points in the human career of dependence upon the great being which sustains and guides.

The second period of childhood, seven to fourteen, leads to the sacrament of initiation into life. In this second stage begins the practice of private worship or systematic expression of gratitude and love for benefactors and guides. The adolescent septennium closes at twenty-one with the ceremony of admission to the great life of the race when the period of his apprenticeship is ended. This was recognized as the most important period. The curriculum of the next seven years ends with the ceremony of destination when a career is entered upon. The education of manhood includes the following fourteen years ending at forty-two with the ceremony of maturity. The next fourteen, ending with sixty-three, culminates in a ceremony of retirement, and from sixty-three till death is called the period of transformation.

This book is an interesting story of a dreamer whose idealism is pedagogically inferior only to that of Plato.

Der Internationale Schülerbriefwechsel, von KARL MARKSCHEFFEL. N. G. Elwert, Marburg, 1903. pp. 44.

Mainly within the last five to eight years has grown up in France, England, Germany and the United States a system of international correspondence. Any high school or college that so desires, by communicating with Professor E. Magill, of Swarthmore College, Pennsylvania, can, by fulfilling certain very simple requirements, have each of its pupils put in communication with some individual student of similar grade in France or Germany with whom correspondence can be established involving at least one letter a month during the school year. These letters may be written in the vernacular of the pupil or if he is competent in the language of the pupil to whom he writes. This method has been greatly praised by its friends as interesting pupils in other countries and the modes of life of those of their own age there and has been a great stimulus to the study of foreign language. This booklet gives a very interesting account of this movement in different lands, samples of letters, directions for membership and rules for the correspondence.

The Great French Painters and the Evolution of French Painting from 1830 to the Present Day, by CAMILLE MAUCLAIR. E. P. Dutton and Co., New York. pp. 168.

The author gives us a rapid sketch of the history of painting in France for the last seventy years. In successive chapters he treats of romantic, academic, realistic, oriental, symbolic, impressionistic and intimistic painters, with a chapter on portraits and on decoration. The characterizations of the different artists are brilliant and impressive. Indeed, it is rare that in a book of this kind where scores of pictures compete with the text that the latter is really more attractive than the former.

The Mother-Artist, by JANE DEARBORN MILLS. The Palmer Company, Boston, 1904. pp. 148.

This is a somewhat nondescript book. It has nothing like an index but the sections are headed love, intellect, babies as teachers, men and women, discipline, natural law, limited means, gain, protest and answer, etc. It is a sensible, good-hearted book abounding in healthful sentiments, but without the slightest pretension to any scientific character.

A History of Dancing from the Earliest Ages to Our Own Times. From the French of Gaston Vuillier. D. Appleton & Co., New York, 1898. pp. 446.

This elegant work contains 20 full plates with 409 illustrations. The latter are full of interest, and, while the text is often chatty and gossipy, it is manifestly by an enthusiast. Especially interesting to many will be the chapters on religious and sacred dances. Perhaps next will come those on rustic and pastoral dances. The great period of modern dancing appears to have been under Louis XIV, XV and XVI when it had a certain degree of secularity and was placed in more or less antagonism to religion and morality.

The Art of Dancing, embracing a full description of the various dances of the present day together with chapters on etiquette, the benefits and history of dancing, by JUDSON SAUSE. New York. pp. 181.

The Educational Music Course: Teachers' Edition for Elementary Grades, by JAMES M. McLAUGHLIN and W. W. GILCHRIST. Ginn & Co., Boston, 1904. pp. 271.

This work discusses the phases and object of vocal music and has something about the child's voice which is almost absurdly antiquated in view of the recent German researches in this field. The work suffers from multiplicity of authors and suggests the baleful effects of having been made to suit the different pedagogical theories and authorities now in the field. Thus, it represents nothing in particular and has neither very grave faults or great merits. We must rank it, however, in every respect far below the collection of songs recently published by Jane Byrd Radcliffe-Whitehead which, as we have elsewhere said, is the ideal book so far.

Folk-Songs and Other Songs for Children. Edited by Jane Byrd Radcliffe-Whitehead. Oliver Ditson Company, Boston, 1903. pp. 226.

At last we have a book of genuine folk-songs, English, Scotch, Irish, German, French, Scandinavian, Polish, Russian, Italian, Spanish, with songs of patriotism, carols, nursery songs, lullabies, rounds, catches and part songs, two hundred and twenty-six in all, all in English, most of them in old original music, well chosen, and with a rich, refreshing aura of the good old times, and all with very simple piano

accompaniments. We have seen nothing in this line which is more wholesome, refreshing, or soundly pedagogic. We cannot help wishing, invaluable as it is, that the author had seen fit to add a few good negro, and perhaps even Indian, melodies, although we can better dispense with college songs. This is a book that should be in every schoolroom for the lower grades and every pupil ought to sing or, at least, hear every one of them.

The History of American Music, by LOUIS C. ELSON. The Macmillan Co., New York, 1904. pp. 380.

This author has collected a fascinating book of pictures, stories, incidents and, indeed, history, which altogether gives an excellent picture of the development of music in this country from its first very feeble and almost absurd beginnings in the pre-Revolutionary time up to the present. Most of those whose portraits he gives and describes are living contemporaries.

London Education, by SIDNEY WEBB. Longmans, Green & Co., New York, 1904. pp. 219.

The education acts of 1902-3 make for the first time, all grades of education in London a public service. It is certainly no easy matter to construct a scheme for five million people. This book is devoted, however, not to politics but to administration, not to what ought to be but what is. It is, thus, a description of the organization of the university, commercial education, the polytechnics and the library service. It is a godsend to those who have had some difficulty in mastering the technicalities of recent English legislation.

Zwei Jahrhunderte Deutschen Unterrichts in den Vereinigten Staaten, von L. VIERECK. Friedrich Vieweg & Sohn, Braunschweig, 1903. pp. 293.

This is an amplification of chapter fourteen of the Report of the Bureau of Education in 1900-1901. It traces the history of the teaching of German in this country from the year 1825 to the present time in universities, colleges, secondary, grammar, normal, church, private, summer, and evening schools; also in the kindergarten and Turner societies, etc., with a glimpse at the future of German instruction. It is illustrated by many portraits of leading teachers of German language and literature in the United States.

Das höhere Schulwesen Deutschlands, von HUGO MUELLER. Chr. Belser, Stuttgart, 1904. pp. 135.

After a brief account of the educational discussions in recent years in Germany the author leads up to the conclusion that "all work that is enforced and done without pleasure is worthless for culture, and everything depends upon working with joy and with the whole soul."

Short Studies in Education in Scotland, by JOHN CLARKE. Longmans, Green and Co., London, 1904. pp. 269.

This is a contribution towards the solution of problems peculiarly Scotch. The author first describes the origins of existing educational institutions, and then passes successively to governing bodies and funds, relations of elementary and secondary education, the school board, burgh and county councils and committees, the teacher—the university—endowments, the new educational authority, the central authority, analogies between Scotland and England, some aspects of the work of the new local authority.

Notice sur l'organisation actuelle de l'instruction publique au Japon. Mars, 1899. pp. 284.

This admirable monograph discusses the education of primary, supe-

rior, and professional grades; describes the duties of the minister of instruction and of the higher council; and has a chapter on libraries, Japanese academies, observatories, etc.

The Ideals of the East, with special reference to the art of Japan, by KAKASU OKAKURA. 2d ed. E. P. Dutton & Co., N. Y., 1904. pp. 244.

This little book is an inspiration. Its author, once head of a European commission and of the new art school at Tokyo, resigned because his desire to revive the traditions of ancient Japanese art did not meet with governmental favor, and is now the head of an independent school and the leader of the new old Japanese movement in art. His familiarity with things Chinese and Asian as well as European is amazing. The inspiring conception is that Asia is one, that Confucius, the Vedas and Buddha are the culminations of movements of Asiatic dimensions. Asia is a living organism. The Himalayas divided only to accentuate it. Japan became the organ of Japanese art because all these movements had a continuous, unbroken development only in that country. Asiatic culture is profoundly different from European and in the opinion of this author far higher, the great web of Asiatic thought and feeling of which Japan is the best repository and where the key to Indic literature, religion, the stone temples, the ancestor worship of China, etc., are found, which is represented by many waves of continental influences which has left a clear strata with many monuments in Japan. Lofty contemplation, ascents of the dignity of man apart from all the adventitiousness of wealth and station, charity, self-knowledge, interest in religion, all the great forms of which have come from Asia:—these, when the impending restoration occurs, will reveal to her that the secret of the future lies in the past. Victory from within or mighty death from without is alternative. The vulgarity of Europe has clouded the morrow of Yamato, but the voice of Asia will again be heard in the world.

History of the Moorish Empire in Europe, by S. P. SCOTT. J. B. Lippincott Co., Philadelphia, 1904. Vol. I, pp. 761. Vol. II, pp. 686. Vol. III, pp. 696.

These imposing volumes begin with the story of the ancient Arabians, the rise and progress of Islam, the visigothic monarchy, the invasion and conquest of Spain, the emirate. It then sketches the history of the various important rulers, devotes a chapter each to the influence of the Moors on Europe, the Spanish Jews, the Christians under Moslem rule, the Hispano-Arab age of literature and science, Moorish art, manufactures, commerce, manners, customs and amusements, the Moorish domination in Sicily, the wars with the Christians, the reconquest, the last war with Granada, and the termination of the re-conquest.

Russian Affairs, by GEOFFREY DRAGE. E. P. Dutton & Co., N. Y., 1904. pp. 738.

This work is the result of years, but its publication just as the hostilities between Japan and Russia broke out is most opportune. After a brief sketch of recent Russian history, the author discusses agriculture and the agrarian development, famines, industry, commerce, finance, Poland and the Baltic provinces, Siberia, Manchuria, Central Asia, and many special topics are treated in an appendix. The book is provided with nearly a dozen interesting maps.

The Ship of State by Those at the Helm. (The Youth's Companion Ser.) Ginn & Co., Boston, 1904. pp. 264.

These papers are reprinted from the Youth's Companion. The first

article is on the presidency by Theodore Roosevelt. H. C. Lodge describes the life of a senator, T. B. Reed that of a congressman, Judge Brewer the supreme court, John D. Long the navy and the war college. W. C. Sawyer tells how our soldiers are fed, and John Lidington how they are clothed. Mr. Wilson describes the postoffice, J. D. Richards Uncle Sam's law business, etc.

Old-Time School and School-Books, by CLIFTON JOHNSON. The Macmillan Co., New York, 1904. pp. 381.

This is a charming souvenir of "ye olden times" in American education. The colonial schools, the New England primer, the district schools, fly leaf scribblings, Noah Webster, the first geographies, arithmetics, readers, grammars, etc., are described with copious illustrations both in the way of pictures and quotations. The author does not attempt a history but he certainly has an eye for the selection of characteristic facts illustrating history.

Brewer's Directory of School Superintendents and Normal Principals. Orville Brewer Publishing Co., Chicago, 1904. pp. 126.

This pamphlet of 126 pages is something more than a mere advertisement but has become a convenient handbook. Every other page contains a portrait of some principal or, more commonly, a superintendent. Many other statistics of enrollment, salaries, etc., are given.

The Louisiana Purchase and the Exploration, early history and building of the West, by RIPLEY HITCHCOCK. Ginn & Co., Boston, 1904. pp. 349.

This is a very timely book and gives a full and very readable story of the main events in its theme. It is interesting reading for any one although it is intended as a textbook. It is copiously illustrated and, like most of the works of this publisher, leaves little to be desired in the way of typography.

Methods of Industrial Peace, by NICHOLAS PAINE GILMAN. Houghton, Mifflin & Co., Boston, 1904. pp. 436.

In this work are discussed such topics as association in modern industry, combination of employers and employees, collective bargaining, the sliding scale, the incorporation of industrial unions, industrial war, some rights and duties of the public, conciliation in labor disputes, state boards, labor disputes and their regulation, the essential conditions of industrial peace. Those who know the author's ability, knowledge and laudable ideals in this field will not be disappointed in this book.

Teacher's Manual for Second Reader. Ed. by Isaac K. Funk. Funk, Wagnalls Company, New York, 1904. pp. 307. (Funk & Wagnalls Standard Reader Series.)

This is a general introduction to the Standard Reader Series. The material is meant to be purely suggestive and the attention of teachers is called to the source from which additional material will be derived.

The Voice of America on Kishinieff. Edited by Cyrus Adler. The Jewish Publication Society of America, Philadelphia, 1904. pp. 491.

Dr. Adler has accomplished here a very painstaking task. He has attempted to gather first, an account of all the meetings, sermons and resolutions pertaining to this atrocious massacre. In the second part he reprints many editorial articles, and in the third describes the various relief measures and reproduces the petitions that have been circulated upon the subject.

- The Foundation of all Reform.* A guide to health, wealth and freedom. By OTTO CARQUÉ. Kosmos Publishing Co., Chicago, 1904. pp. 66+vi.
- A Scientific German Reader*, by GEORGE THEODORE DIPPOLD. Rev. ed. Ginn & Co., Boston, 1904. pp. 274.
- A Manual of Pronunciation for practical use in schools and families*, by OTIS ASHMORE. Ginn & Co., Boston, 1904. pp. 67.
- Untersuchungen über den Einfluss der Geschwindigkeit des lauten Lesens auf das Erlernen und Behalten von sinnlosen und sinnvollen Stoffen.* Von ROBERT MORRIS OGDEE. Wilhelm Engelmann, Leipzig, 1903. pp. 103.
- Die Einwanderungspolitik und die Bevölkerungsfrage der Vereinigten Staaten von Amerika.* Von DR. R. KUCZYNSKI. Leonhard Simion, Berlin, 1903. pp. 35.
- Essays of Charles Lamb*, selected and edited with introduction and notes by George Armstrong Wauchope. Ginn & Co., Boston, 1904. pp. 413.
- Standard Second Reader.* Ed. by Isaac K. Funk. Funk & Wagnalls Company, New York, 1904. pp. 208. (Funk & Wagnalls Standard Reader Series.)
- The Odes of Confucius*, by L. CRANMER-BYNG. Orient Press, London, 1904. pp. 45.
- The Child.* His thinking, Feeling and Doing, by AMY ELIZER TANNER. Rand, McNally & Co., New York, 1904. pp. 430.
- Lessing's Minna von Barnhelm.* Edited with notes and vocabulary by Richard Alexander von Minckwitz and Anne Crombie Wilder. Ginn & Co., Boston, 1904. pp. 202.
- The Citizen.* A Study of the Individual and the Government, by NATHANIEL SOUTHGATE SHALER. A. S. Barnes & Co., New York, 1904. pp. 346.
- Germelshausen*, von FRIEDRICH GERSTÄCKER. Edited by Griffin M. Lovelace. Ginn & Co., Boston, 1904. pp. 107.
- Minna von Barnhelm oder Das Soldatenglück*, von LESSING. Edited by Richard A. von Minckwitz and Anne C. Wilder. Ginn & Co., Boston, 1904. pp. 202.
- An Elementary American History*, by D. H. MONTGOMERY. Ginn & Co., Boston, 1904. pp. 306+xlil.
- Primary Arithmetic*, by DAVID E. SMITH. Ginn & Co., Boston, 1904. pp. 264.